## An exploration of the innovation process in small digital marketing agencies in the UK: Understanding the social, knowledge and structural capital implications

Valerie Menelec

Salford Business School The University of Salford Manchester, UK

Submitted in Partial Fulfilment of the Requirement for the Degree of Doctor of Philosophy 2018

## **Table of Contents**

Chapte	r 1 – Introduction	13
1.1 I	Background to the research	13
1.1.1	The UK context	16
1.2 I	Rationale for the research	20
1.2.1	Innovation process	20
1.2.2	2 The task and the internal environment	23
1.2.3	8 Research gap	29
1.2.4	Methodology	34
1.3	The aim and objectives of the research	35
1.4 \$	Scope of the research	36
1.5 I	Research Methodology	39
1.6 Co	ontribution	41
1.7 (	Drganisation of the thesis	42
1.8	Summary and Link	43
Chanter	r 2 – Theoretical Background	44
2.1	ntroduction	44
2.2	nnovation	
2.2.1	Service Innovation	46
2.2.2	2 Innovation outcomes	
2.2.3	3 The innovation process	
2.3 I	nter-organisational relationships	
2.3.1	The concept of social capital	74
2.3.2	2 Social capital and the innovation process	94
2.4 I	Knowledge Capital	97
2.4.1	Internal and external Knowledge	
2.4.2	2 Tacit and explicit knowledge	
2.4.3	B Collective and individual knowledge	
2.4.4	Knowledge capital and the innovation process	
2.5	Structural Capital	110
2.5.1	Conceptualisation of structural capital	110
2.5.2	2 Structural capital and the innovation process	113
2.6. S	ocial, knowledge and structural capital and the Resource-Based View	(RBV)
		117
2.6.1	Competencies and capabilities	119
2.7 I	Key characteristics of social, knowledge and structural capital	121
2.8	The framework of social, knowledge and structural capital	
2.9	Analysis of the theoretical gap and establishing the theoretical backgr	ound of
the st	udy	
2.10 S	ocial, knowledge and structural capital	
2.10	Summary and Link	129
Chapte	r 3 – Research Methodology	
3.1	ntroduction	
3.2 I	Research Design	131
3.3 I	Research Philosophies	131
3.3.1	Ontology, Epistemology and Axiology	
3.3.2	2 The Philosophical Approach of the Study	135
3.4	Горіс selection and purpose	137
3.5	Гhe Research Approach	141

3.5.1	Approach to Research	141
3.5.2	Research Type	144
3.5.3	Methodological Choices	146
3.5.4	Research Strategies	
3.4.5	The Unit of Analysis and Time Horizon	
3.5.6	Case study design	
3.5.7	Expert Interview Sampling	
3.6 Res	earch Techniques and Procedures	
3.6.1	Data Collection Techniques	
3.6.2	Data Analysis Techniques	
3.7 01	ality Criteria and Techniques	
3.7.1	Construct Validity	180
372	Reliability	182
3.8 Su	mmary and Link	182
Chantor	A Basaarch Findings Casa Studios	102
	4 - Research I munitys - Case Studies	
4.1 IN	lroduction	103
4. <b>2</b> V	Coop Study 1 Agency A	103
4.2.1	Case Study 1 – Agency A	
4.2.2	Case study 2 – Agency B	
4.2.3	Lase study 3 – Agency L	
4.2.4	Case study 4 – Agency D	
4.2.5	Case study 5 – Agency E	
4.2.6	Case study 6 – Agency F	
4.2.7	Case study 7 – Agency G	
4.2.8	Case study 8 – Agency H	
4.2.9	Case study 9 – Agency I	
4.2.10	Case study 10 – Agency J	
4.2.11	Case study 11 – Agency K	
4.2.12	Case study 12 – Agency L	
4.2.13	Case study 13 – Agency M	237
4.2.14	Summary and key themes of the 13 cases	242
4.3 Cr	oss case analysis	
4.3.1	The context of the UK digital marketing industry	249
4.3.2	Nature of the innovation process	252
4.3.3	Characteristics of social, knowledge and structural capital.	
4.3.4	Implications of social, knowledge and structural capital	
for the	e innovation process	
4.4. D	iscussion	
4.4.1	Nature of the innovation process	299
4.4.2	Characteristics of social, knowledge and structural capital	
and th	eir implications for the innovation process	
4.5. S	ummary and link	
Chapter	5 – Research Findings and Discussion – Expert Interviews	
5.1 In	troduction	321
5.2 Ba	ackground	321
5.3 Find	lings	323
5.3.1	Nature of an innovation process	
5.3.2	Social capital	
5.3.3	Knowledge Capital	
5.3.4	Structural capital	
5.4 Re	ecommendations	339
5.4.1	Social capital	

5.4.2 Knowledge capital	
5.4.3 Structural capital	
5.5 Summary and Link	349
Chapter 6 – Conclusions	
6.1 Introduction	
6.1.1 Summary of the aim and objectives of the study	352
6.1.2 Summary of key results	352
6.2 Limitations of the research and future research	356
6.3 Contribution of the research	357
Appendix A – Interview Guidelines (Case studies)	
Appendix B – Interview Guidelines (Expert Interviews)	
Appendix C – Letter of invitation to participants (Case studies)	
Appendix D – Participants Information Sheet (Case studies)	
Appendix E – Letter of invitation to participants (Experts)	
Appendix F – Participants Information Sheet (Experts)	
Appendix G – Documents reviewed (Case studies)	
Appendix H – Key themes from 'within-case' analysis	
References	

## List of Figures

FIGURE 1-1 DIGITAL TECH INVESTMENT IN 2016 (SOURCE: TECH NATION – TECH CITY UK, 2017) 19
FIGURE 2-1: KEY COMPONENTS OF THE INNOVATION PROCESS (SOURCE: VAN DE VEN ET AL., 2008, P.25)
FIGURE 2-2 INTERDEPENDENCIES BETWEEN TYPES OF COLLECTIVE KNOWLEDGE (ADAPTED FROM HECKER, 2012)
FIGURE 2-3 CLASSIFICATION OF INTELLECTUAL CAPITAL (SOURCE: EDVINSSON AND MALONE, 1997, P.52, IN MATTHIES, 2014, P.93)111
FIGURE 2-4 INTANGIBLE ASSETS: SOCIAL, KNOWLEDGE AND STRUCTURAL CAPITAL (SOURCE: AUTHOR)
FIGURE 3-1 PHILOSOPHICAL ASSUMPTIONS AND PARADIGM IN RESEARCH (SOURCE: AUTHOR)
FIGURE 3-2 THE PHILOSOPHICAL APPROACH OF THE STUDY (SOURCE: AUTHOR)136
FIGURE 3-3 MAIN THEMES OF THE LITERATURE REVIEW (SOURCE: AUTHOR)139
FIGURE 3-4 PHILOSOPHICAL ASSUMPTIONS AND RESEARCH APPROACH (SOURCE: AUTHOR)146
FIGURE 3-5 METHODOLOGICAL CHOICES (SOURCE: SAUNDERS ET AL., 2015, P. 167)148
FIGURE 3-6 EPISTEMOLOGY AND RESEARCH STYLE (SOURCE: EASTERBY-SMITH ET AL., 2012, P.39).150
FIGURE 3-7 EPISTEMOLOGY AND RESEARCH STYLE (ADAPTED FROM EASTERBY-SMITH ET AL., 2012) 
FIGURE 3-8 SUMMARY OF THE RESEARCH PROCESS FOLLOWED BY THE STUDY (SOURCE: AUTHOR).161
FIGURE 3-9 BASIC TYPES OF DESIGN FOR A CASE STUDY (ADAPTED FROM YIN, 2014, P.50)162
FIGURE 3-10 COMPLETE STUDY MAP METHODOLOGY (SOURCE: AUTHOR)
FIGURE 4-1 IMPLICATIONS OF STRONG TIES FOR THE SERVICE INNOVATION PROCESS IN THE STUDIED CASES (SOURCE: AUTHOR)
FIGURE 4-2 IMPLICATIONS OF WEAK TIES FOR THE SERVICE INNOVATION PROCESS IN THE STUDIED CASES (SOURCE: AUTHOR)
FIGURE 4-3 IMPLICATIONS OF KNOWLEDGE FOR THE SERVICE INNOVATION PROCESS IN THE STUDIED CASES (SOURCE: AUTHOR)
FIGURE 4-4 IMPLICATIONS OF STRUCTURAL CAPITAL FOR THE SERVICE INNOVATION PROCESS IN THE STUDIED CASES (SOURCE: AUTHOR)
FIGURE 4-5 UNDERSTANDING THE DYNAMIC BETWEEN SOCIAL, KNOWLEDGE AND STRUCTURAL CAPITAL IN THE STUDIED CASES (SOURCE: AUTHOR)

## List of Tables

TABLE 2-1 CHARACTERISTICS OF THE INNOVATION IN SERVICES	65
TABLE 2-2 CHARACTERISTICS OF THE INNOVATION PROCESS: INNOVATION ADOPTION AND   INNOVATION GENERATION	73
TABLE 2-3 THREE DIFFERENT PERSPECTIVES OF SOCIAL CAPITAL (ADAPTED FROM BRUNIE, 2009   P.253)	), 77
TABLE 2-4 FOUR DIMENSIONS OF KNOWLEDGE (SOURCE: SPENDER, 1994)	105
TABLE 2-5 KEY CHARACTERISTICS OF SOCIAL, KNOWLEDGE AND STRUCTURAL CAPITAL (SOURCE AUTHOR)	: 123
TABLE 3-1 DEDUCTIVE AND INDUCTIVE REASONING IN RESEARCH (ADAPTED FROM SAUNDERS E   2015)	T AL., 144
TABLE 3-2 CHARACTERISTICS OF QUANTITATIVE AND QUALITATIVE APPROACHES (ADAPTED FRO MERRIAM, 2009)	OM 147
TABLE 3-3 JUSTIFICATIONS FOR THE SELECTED CASE STUDY METHODOLOGY (SOURCE: AUTHOR)	156
TABLE 3-4 TYPES OF INTERVIEW (ADAPTED FROM EASTERBY-SMITH ET AL., 2012)	170
TABLE 3-5 THE ROLE OF PARTICIPANTS AND SIZE OF AGENCIES (CASE STUDIES)	171
TABLE 3-6 EXPERTISE OF PARTICIPANTS (CASE STUDIES)	174
TABLE 4-1 DETAILS OF PARTICIPANTS - CASE STUDY A	184
TABLE 4-2 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY A	184
TABLE 4-3 DETAILS OF PARTICIPANT - CASE STUDY B	188
TABLE 4-4 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY B	188
TABLE 4-5 DETAILS OF PARTICIPANT - CASE STUDY C	191
TABLE 4-6 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY C	191
TABLE 4-7 DETAILS OF PARTICIPANTS - CASE STUDY D	195
TABLE 4-8 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY D	195
TABLE 4-9 DETAILS OF PARTICIPANT - CASE STUDY E	199
TABLE 4-10 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY E	199
TABLE 4-11 DETAILS OF PARTICIPANT - CASE STUDY F	203
TABLE 4-12 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY F	203
TABLE 4-13 DETAILS OF PARTICIPANTS - CASE STUDY G	207
TABLE 4-14 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY G	208

TABLE 4-15 DETAILS OF PARTICIPANT - CASE STUDY H	213
TABLE 4-16 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY H	214
TABLE 4-17 DETAILS OF PARTICIPANT - CASE STUDY I	219
TABLE 4-18 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY I	219
TABLE 4-19 DETAILS OF PARTICIPANTS - CASE STUDY J	224
TABLE 4-20 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY J	224
TABLE 4-21 DETAIL OF PARTICIPANT - CASE STUDY K	229
TABLE 4-22 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY K	230
TABLE 4-23 DETAILS OF PARTICIPANT - CASE STUDY L	233
TABLE 4-24 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY L	234
TABLE 4-25 DETAILS OF PARTICIPANT - CASE STUDY M	238
TABLE 4-26 SECONDARY SOURCE DOCUMENTS REVIEWED - CASE STUDY M	238
TABLE 4-27 CHARACTERISTICS OF THE INNOVATION PROCESS IN EACH CASE STUDY (SOURCE: AUTHOR)	243
TABLE 4-28 KEY CHARACTERISTICS OF INNOVATION PROCESS, AND SOCIAL, KNOWLEDGE AND STRUCTURAL CAPITAL IN EACH CASE STUDY (SOURCE: AUTHOR)	247
TABLE 4-29 KEY IMPLICATIONS OF SOCIAL, KNOWLEDGE AND STRUCTURAL CAPITAL FOR THE INNOVATION PROCESS IN EACH CASE STUDY (SOURCE: AUTHOR)	249
TABLE 4-30 INNOVATION OUTCOMES AND INNOVATION PROCESS IN THE STUDIED CASES (SOURCE AUTHOR)	l: 259
TABLE 4-31 NATURE OF THE INNOVATION PROCESS IN THE STUDIED CASES (SOURCE: AUTHOR)	260
TABLE 4-32 STRUCTURAL AND RELATIONAL CHARACTERISTICS OF WEAK TIES IN THE STUDIED CA (SOURCE: AUTHOR)	SES 271
TABLE 4-33 STRUCTURAL AND RELATIONAL CHARACTERISTICS OF STRONG TIES IN THE STUDIED CASES (SOURCE: AUTHOR)	272
TABLE 4-34 CHARACTERISTICS OF KNOWLEDGE IN THE STUDIED CASES (SOURCE: AUTHOR)	277
TABLE 4-35 CHARACTERISTICS OF STRUCTURAL CAPITAL IN THE STUDIED CASES (SOURCE: AUTHO	)R) 283
TABLE 4-36 IMPLICATIONS OF SOCIAL CAPITAL FOR THE INNOVATION PROCESS IN THE STUDIED CASES (SOURCE: AUTHOR)	288
TABLE 4-37 IMPLICATIONS OF WEAK AND STRONG TIES FOR THE INNOVATION PROCESS IN THE STUDIED CASES (SOURCE: AUTHOR)	288
TABLE 4-38 CONTRIBUTIONS, APPLICATIONS AND IMPLICATIONS OF STRONG AND WEAK TIES FOR THE INNOVATION PROCESS IN THE STUDIED CASES (SOURCE: AUTHOR)	290

TABLE 4-39 IMPLICATIONS OF KNOWLEDGE FOR THE SERVICE INNOVATION PROCESS IN THE STUDIED   CASES (SOURCE: AUTHOR)
TABLE 4-40 IMPLICATIONS OF STRUCTURAL CAPITAL FOR THE SERVICE INNOVATION PROCESS   (SOURCE: AUTHOR)
TABLE 4-41 MATRIX OF SIX DIMENSIONS OF KNOWLEDGE (SOURCE: AUTHOR, ADAPTED FROM SPENDER, 1994)
TABLE 4-42 FINDINGS FROM THE CROSS-CASE ANALYSIS (SOURCE: AUTHOR)
TABLE 4-43 SOCIAL CAPITAL: QUOTES, REFERENCES AND KEY LEARNING (SOURCE: AUTHOR)
TABLE 4-44 KNOWLEDGE CAPITAL: QUOTES, REFERENCES AND KEY LEARNING (SOURCE: AUTHOR) 317
TABLE 4-45 STRUCTURAL CAPITAL: QUOTES, REFERENCES AND KEY LEARNING (SOURCE: AUTHOR)320
TABLE 5-1 EXPERTISE AND POSITION HELD BY EXPERTS (SOURCE: AUTHOR)
TABLE 5-2 NATURE OF AN EFFECTIVE INNOVATION PROCESS (SOURCE: AUTHOR)
TABLE 5-3 CHARACTERISTICS OF SOCIAL, KNOWLEDGE AND STRUCTURAL CAPITAL AND   IMPLICATIONS FOR THE INNOVATION PROCESS
TABLE 5-4 IMPLICATIONS AND RECOMMENDATIONS - EXPERTS AND CASE STUDIES (SOURCE: AUTHOR)

## Acknowledgements

I would like to thank the University of Salford, for giving me the opportunity to undertake this study, and to enhance and deepen my knowledge and understanding, which has helped shape my work.

I would like to give a particular thank you to my supervisor, Dr. Susantha Udagedara, for his consistent support, guidance and teaching during these past few years, and to Professor Kurt Allman, in his role of supervisor in my first year of study, who helped me set the direction of the research.

Thank you also to the people who helped me make these few years possible: Michelle Jones, Professor Ralph Darlington, Juliette Underwood, the staff within the library and IT support, all the participants in the research, and my family and friends.

Finally a special thank you to my partner for showing patience and providing me with great support during this time.

## List of Abbreviations

BPIN	Business Process Management
CAS	Complex Adaptive Systems
Col	Communities of Innovation
CRM	Customer Relationship Management
DA	Discourse Analysis
FINTECH	Financial Technology
GDP	Gross Domestic Product
HRM	Human Resources Management
IC	Intellectual Capital
ICT	Information and Communication Technologies
IPA	Interpretative Phenomenological Analysis
KC	Knowledge Capital
KIBS	Knowledge Intensive Business Services
NDAs	Non disclosure Agreements
NPD	New Product Development
NSD	New Service Development
PPC	Pay Per Click
PPR	Post Project Review
R&D	Research and Development
RA	Recommended Agency
RAR	Recommended Agency Register
RBV	Resource-Based View
ROI	Return on Investment
SC	Social Capital
SEM	Search Engine Marketing
SDL	Service Dominant Logic
SDMAs	Small Digital Marketing Agencies
SEO	Search Engine Optimisation
SIC	Standard Industrial Classification
SMEs	Small and Medium Enterprises
SOI	Structural and Organisational Intelligence
StC	Structural Capital
STP	Science and Technology Parks
ТА	Thematic Analysis
VR	Virtual Reality
SOI StC STP TA VR	Structural and Organisational Intelligence Structural Capital Science and Technology Parks Thematic Analysis Virtual Reality

#### Abstract

In this increasingly complex and competitive society organisations are compelled to innovate developing inter-organisational relationships and sharing knowledge. In service innovation one key characteristic of the service innovation process is the involvement of parties from the external environment of organisations, such as clients, among others, who provide beneficial resources, particularly to small service organisations. These influential relationships have commonly been investigated through the approach of social capital. Also influential to the service innovation process are knowledge (a resource of social capital and an internal organisational resource), and structural capital (which as an internal structure provides support to both social and knowledge capital). Therefore, the study aimed to further understand the service innovation process in the light of social, knowledge and structural capital. The background to the research highlighted the imperative for small digital marketing agencies to innovate with limited resources, which provided the grounds for the study.

A qualitative approach was used to gain a better understanding of the experience and behaviour of small digital marketing agencies with regard to their innovation. A total of thirty interviews were completed. Multiple case studies were carried out among thirteen agencies to allow a wider and deeper exploration of the research questions. An expert interview methodology was also applied for its suitability to achieve one objective of the study. Thirteen experts were interviewed to collect insights based on their practical experiences in digital marketing, which were used to develop recommendations.

Analysis from the findings highlighted that small digital marketing agencies used an innovation process that was sequential but nonetheless flexible and open to the challenges of service innovation. Weak ties and strong ties creatively and technically strengthened the process and enhanced its consistency, while trust was largely based on the ability of agencies to deliver the work. Moreover, the process was found to be reliant on creative knowledge in addition to technical knowledge. Organisational knowledge was held in tangible systems, intangible practices and employees, which enhanced the efficiency, quality and interactivity of the process by enabling better

planning, quality control and communication with the task environment. Finally, a need to establish a practice of co-production with clients was highlighted as one key recommendation to enhance the innovation process through the combination of resources.

Several contributions were drawn, with the first being the presentation of a comprehensive picture of innovation by seeking to understand the innovation process with regard to social, knowledge and structural capital. Furthermore, a theoretical link between each element was provided, thus filling the gap highlighted in the literature. The study also contribute to the discussion of intellectual capital with the first application of a theoretical framework of intangible assets that encompasses knowledge as capital, in addition to social and structural capital. The use of a multidimensional social capital framework also provided a dynamic illustration of inter-organisational relationships in the context of services. The study also contribute to the discussion of intellectual capital in addition to social and structural capital in addition to social and structural capital.

The learning gained from small digital marketing agencies and their innovation process contributes to the development of the integrative approach to service innovation that seeks to be relevant to both manufacturing and services. The consideration of expert interviews as a research methodology provided some new empirical insights for adding to the discussion on methodological triangulation in qualitative studies. Through recommendations practical contributions were also offered for improvements in the innovation process in small digital marketing agencies.

12

#### Chapter 1 – Introduction

#### **1.1 Background to the research**

In this complex and increasingly competitive society, which is characterised by a knowledge based economy, organisations are compelled to adopt more innovative and flexible approaches that they perform by accessing and sharing knowledge, and developing relationships with others (Barcet, 2010; Castells, 2010; Van Hemert et al., 2013; Filieri et al., 2014; Mitrega et al., 2017). In fact, the concept of collaboration and networking has been recognised as a core corporate strategy by organisations (Potts and Mandeville, 2007). The need for collaborative relationships to innovate has been established at a policy level for years. For instance, the guiding policy report commissioned by the Department of Trade and Industry (DTI), and policy papers stress the critical need to stimulate innovation and promote collaboration between organisations to enhance market prosperity; these are considered part of a new approach to economic development (Porter and Ketels, 2003; DBIS, 2014a, 2017) Consequently, businesses, the government and other entities need to reconsider their policies. For organisations this implies reviewing their strategies and developing an operating environment within which they can be more competitive. In an earlier report from the DTI (2003) on UK innovation the need for collaborative practice and relationships is further recognised by the emphasis that collaboration is one of seven key elements that drives innovation performance. These government reports provide valuable insights for organisations into the implications of understanding the significance of inter-organisational relationships for businesses, and the need to manage them accordingly; this consequently, highlights the need for further research on the topic.

While this dynamic applies to both products and services, the growth of the service economy in addition to a better recognition of the role of services, and the blurring of boundaries between services and products (Miles, 2000; Barcet, 2010; Sundbo, 2010; Toivonen, 2010; Den Hertog, 2010; Chesbrough, 2012, Djellal et al., 2013) have generated increasing attention from academia and policy-makers on the subject of services. This is an area traditionally overlooked (Miles, 2000; Coombs and Miles, 2000; DTI, 2007, Deprey et al., 2012; Witell et al., 2016; Chen et al., 2017),

particularly with regard to innovation generally and how organisations innovate specifically (Howells, 2010; Chesbrough, 2012; Kindström et al., 2013; Rauter et al., 2018). Given that today most of the top economies in the OECD obtain half or more of their GDP from services (OECD, 2017a) such attention is particularly relevant. For instance, in the UK, the Professional and Business Services (PBS) sector represents 11% of the economy and is forecasted to grow over the coming years (DBIS, 2014b; GovUK, 2015). The service industry accounted for 78.8% of the UK GDP in 2013 (ONS, 2017a). As the sector becomes increasingly competitive it is now required to develop through collaboration and innovation (Deloitte, 2015).

In this respect, the digital sector is of particular interest, where 98% of digitally related organisations are small firms; moreover, this sector is at the core of UK growth. In 2017 digital technology industries contributed £97 billion to the UK economy (Tech Nation, 2017). It is estimated that 15% of new UK organisations created in 2015 were digital meanwhile employment in the sector represents 6% of the UK workforce, but by 2020 is forecasted to have grown faster than any other sector (Tech Nation, 2015; GovUK, 2017a). Central to the government's digital strategy, which is aimed at developing an 'information economy' (Innovate UK, 2015), is an approach for long term innovation and collaboration within the sector. The relevance of digital innovation has been particularly emphasised following the Brexit referendum and occupies a fundamental strategic place in the plan of the UK government to strengthen the post-Brexit economy (GovUK, 2017a). The second largest sector in the digital industry is advertising and marketing after software development (Tech Nation, 2015). The importance of this sector's size is due to rapid digital transformation across all industries, which has led to an increase in demand for new digital marketing services. Meanwhile organisations are increasingly investing in inhouse digital specialists their most intricate digital marketing activities are still outsourced to digital marketing agencies (Chaffey and Allen, 2016). There is also further potential for the market to grow since, in 2016, Chaffey and Allen (2016) found that 47% of organisations in the UK did not have a digital plan or digital strategy, and 44% did not have a clear marketing strategy.

However, this transformation has added to the competition between brands to attract

the attention of consumers and generated an increase in digital enabled consumers. Therefore, digital marketing agencies are required to keep up with digital and creative advancements and to provide some wider and more varied approaches and solutions. To not do so would jeopardise their survival and leave the industry disconnected from cutting edge innovation practices (Jensen, 2008; Truong and Simmons, 2010; DBIS, 2016). Furthermore, as the number of new agencies, and thus competitors, are expected to increase agencies have to be more innovative and work collaboratively (DBIS, 2014b, 2016; Marketing Week, 2018). This is evidenced in large agencies, where services are perceived as similar to products, due to their increased focus on design and innovation services, and their deeper engagement with clients (Econsultancy, 2017). Large agencies show that they are adapting to the transformation amidst a UK economy that is recovering and growing, which tends to lessen innovation, and the challenges of skills shortages that innovation engenders (Czerniawska, 2006; PWC, 2015; Innovate UK, 2015; Econsultancy, 2017).

Insight into the trends and future development of digital marketing in the UK is extensively available; however, there is limited information on the performance of the industry and its organisations. Global scope reports, such as the SoDA and Forrester Reports (2016, 2017) further highlight the confidence of large agencies with regard to innovation as they ensure they are prepared to innovate in response to an increasingly complex world with innovation processes adapted to radical or incremental innovations. For instance, consultancy innovation services and the development of an innovation lab are two radical innovations that enable large agencies to grow their revenue. Their access to a broad range of national and international based-resources often supports these innovations. The reports also highlight the relevance of collaborative relationships on innovation in small US agencies underlining collaboration with client's other partners as a main engaging model.

In contrast, there is a less clear picture of innovation in small digital marketing agencies in the UK and whether they adapt to this increasingly complex environment. Although it is acknowledged that small agencies are innovative (Econsultancy, 2017), it is particularly unclear for instance how they innovate and whether they use a

15

process to innovate services (Gottfridsson, 2011). It cannot be assumed that innovation practices within small organisations are transferable from large organisations (McDermott and Prajogo, 2010). Small digital marketing agencies have less resources and capacities at their disposal than large agencies (Lee et al., 2010; SoDA, 2017) and they are likely to rely on external social relationships and knowledge sources for innovation (Edwards et al., 2005; Preston et al., 2009; Gronum et al., 2012; Filieri et al., 2014). However, at a time where social relationships are perceived as key resource enablers in the knowledge based economy (Lee et al., 2010; Barcet, 2010; Castells, 2010; Van Hemert et al., 2013; Filieri et al., 2014) there is no clear indication of the innovation process in small digital marketing with reference to social relationships. These arguments have made small digital marketing agencies in the UK the ground for this study.

#### 1.1.1 The UK context

The UK has an influential political position worldwide. Following the Brexit referendum, the resignation of the Conservative Prime Minister triggered the call for an early General Election. This led to a hung, and arguably more instable parliament, where the Conservative minority government was compelled to reach an agreement with the Democratic Unionist Party of Northern Ireland to secure control. Whilst it is still difficult to know whether the withdrawal from the European Union will impact the influential position of the UK, political instability is nonetheless forecasted (Reuters, 2017). The potential difficulty of the government to assess the long-term impact of Brexit has been referred to as a political, as well as an economical crisis (FT, 2018). This instability is further reinforced by a potential call from Scotland for a second referendum on Scottish independence.

One of the current political focus of the government, in addition to the Brexit negotiations with the European Union, is the establishment of clear industrial and digital strategies to enhance industrial and digital innovation. These are seen as fundamental to a post Brexit strategy to strengthen the country's economy (GovUK, 2017a). The focus is also on health with policies aimed at reducing health inequalities and strengthening the efficiency and productivity of the National Health Service (GovUK, 2017b). Furthermore, there is emphasis on the reformation of the housing

market and on new homes following the economic crisis of 2008 and its consequent effect on mortgages, which reduced the provision of new houses. Whilst the housing policy of the government in 2015/2016 led to a 12% increase in housing stock this still falls short of meeting the demand (Parliament UK, 2017a). As demand overtakes supply, there is the potential for further social and economic implications.

In 2016, the UK was the fifth largest economy in the world in terms of economic growth. The growth was 1.8% ahead of the USA at 1.6% but behind Germany at 1.9% (IMF, 2018). Meanwhile, the GDP for the European Union was 1.9% (IMF, 2018). This indicated relevant growth despite the Brexit referendum. However, at the beginning of 2017, economic growth slowed and has since remained at 1.5%. Furthermore, growth is expected to further reduce in 2018 and 2019, with a forecast of 1.3% by 2020 (OECD, 2017b; FT, 2018). A difficult exit from the European Union has the risk to potentially damage the long-term growth of the UK economy. The OECD (2017b) sees the need for the UK to negotiate a comprehensive free-trade agreement with the European Union and other countries in order to reduce the damage of Brexit.

Financial help from the government has provided support to the UK economy, although the lossd of value in the currency following the referendum has led to an increase in consumer prices. Furthermore, the level of consumer debt is high and household incomes are stagnant. All these elements pose added risks to the financial stability of the country (OECD, 2017b). Meanwhile, although the rate of employment at below 4.5%, is at its lowest for 42 years, it is forecasted to increase as the growth of GDP slows down. The uncertainty from Brexit has particularly affected the investment of organisations, and consequently further affected productivity (OECD, 2017b). This low productivity is affected by the high level of low skills, which has led to the government to reform funding opportunities for apprenticeships and encourage the adoption of new technical qualifications.

At the end of 2017, the UK continued to experience growth in the export of manufactured products due to the lower value of the currency and the economic recovery of the European Union (FT, 2017a). However, over the years,

manufacturing has registered a consistent decrease as a share of the UK economy. In 2016, manufacturing accounted for 10% of the UK economy, which significantly reduced from 17% in 1990. In contrast, services have consistently increased. In 2016, services represented 80% of the economy, in contrast to 69% in 1990 (Parliament UK, 2017b). Trading in both the manufacturing and service sectors is likely to be impacted by the UK leaving the European Union although this also provides the potential for trade agreements with countries outside the EU. Furthermore, UK universities are another important contributor to the UK economy. The good level of educational infrastructure offering high quality education is reflected in the UK's worldwide ranking (Unesco, 2018) and generates a valuable contribution to the economy. It is estimated that international and home students contribute £95 billion to the UK economy, which is a 15% increase from 2012, and education represents 3% of overall UK employment (Oxford Economics, 2017).

The requirement for an additional older workforce is having a consequent impact on retirement, whilst calls for more women to work (PWC, 2018) require organisations to develop more flexible retirement policies. The rising cost of university education with student debts reaching an average of £50,000 has led some students to question the need to attend university and some universities to provide lower cost courses (The Guardian, 2018); both of these are likely to have long-term social and economic impacts.

With regard to technology, whilst the World Bank confirms that the number of patents has been decreasing over the years it also shows an increase in R&D expenditure (World Bank, 2017). The UK has a strong reputation for digital technology; for instance, it is recognised as the global centre for financial technology (FinTech), which in 2015 contributed over £6 billion in revenue to the UK economy (GovUK, 2017a). Furthermore, investment in digital technology is 50% higher in the UK than in other European countries (Tech Nation, 2017) (Figure 2.4). The government aims to build on this reputation to further enhance digital innovation to strengthen the post Brexit economy. The strategy for digital innovation that seeks to develop better digital infrastructure and encourage the adoption of digital technology in organisations (GovUK, 2017a) are likely to result in a further demand for digital specialisms.

Additionally, the focus of the strategy on developing digital skills and digital ecosystems has some implications for tackling the lack of digital skills in the UK and attracting digital capacities from abroad. Undeniably, the uncertainty of Brexit in terms of immigration policies is expected to have some impact on the recruitment of skilled workers and subsequently on smaller tech businesses that are part of the ecosystem, and on which large tech organisations, such as Facebook, rely (FT, 2017b). Nonetheless, the development of an environment supportive of innovation is also expected to benefit digital tech organisations by providing them with easy access to financial and flexible regulations.



2016 Digital Tech Investment £bn

Figure 1-1 Digital Tech Investment in 2016 (Source: Tech Nation - Tech City UK, 2017)

#### 1.1.1.1. Small digital marketing agencies

Digital advertising and marketing is the second largest sector in the digital industry and has been experiencing consistent growth. For instance, the area of digital advertising increased by 3.5% by the end of 2017 and although spending on digital advertising is expected to slow due to the uncertainty of Brexit, it is still estimated to grow by 2.8% in 2018 (Marketing Week, 2018). Additionally, there is potential for

further growth as a large number of organisations still lack digital strategies (Chaffey and Allen, 2016). This potential is reflected in the prediction that employment in the digital industry is expected to grow by 6% by 2020 (DBIS, 2016). This requires digital marketing agencies to keep pace with digital advancements, to use innovative approaches, and to provide innovative offerings. Industry reports indicate that large agencies are carrying out innovations adapted to their own processes such as developing consultancy innovation services and innovation lab among others (SoDA and Forrester Reports, 2016, 2017). However, while small agencies are known to innovate (Econsultancy, 2017) their approach remains less clear; therefore, the study sought to explore small digital marketing agencies.

The strong digital economy has resulted in a digital spreading across a large number of industries and activities. Some limitations have been found, with regard to the representation of SIC (Standard Industrial Classification) codes for the digital economy, for they omit some organisations, such as scientific and technical engineering and consultancies (NIESR, 2013). Digital marketing is defined as digital related activities used with established communications to deliver marketing objectives (Chaffey et al., 2006). Digital marketing agencies are described by the Chartered Institute of Marketing (CIM, 2018) as organisations that specialise in the promotion of brands and/or products and services for client organisations through different digital media.

## **1.2 Rationale for the research**

The rationale for the research emerged from the theoretical, empirical and methodological needs identified with regard to the innovation process and the influencing elements of inter-organisational relationships, which are explored through the concept of social capital, and of knowledge and structural capitals.

#### 1.2.1 Innovation process

#### **1.2.1.1** An integrative approach to the innovation process

To contrast with the broad attention given to product innovation and the derived

20

theoretical frameworks, a large number of studies have developed theoretical models that are only applicable to service innovation; these take into account the characteristics of services but do not acknowledge technology. For instance, based on their analysis of the German innovation survey, Hipp and Grupp, (2005) develop a new innovation typology as a contribution to better measure service innovation in knowledge intensive business services. They argue that innovation in manufacturing cannot apply to services and that technology resources are not the focus of the service innovation process. Gadrey and Gallouj (1998) provide also a new classification of service innovation (ad hoc, expertise-field and formalised innovation) based on the claim that services cannot dissociate a product from a process innovation. Furthermore, additional service only frameworks have been developed within consultancy, professional, financial and care services settings (Gadrey et al. 1995; Gallouj, 1998; Damanpour et al., 2009).

Studies that have investigated the innovation process in services have most often applied models derived from product innovation or models only applicable to services (Heusinkveld and Benders, 2002; Syson and Perks, 2004; Smedlund, 2008a). However, the joint role of products and services in the current economy indicates that both technological and non-technological perspectives should be taken into account (Camacho and Rodriguez, 2005). In fact, both are likely to provide a broader and more open consideration of innovation (Gallouj and Weinstein, 1997). This implies the need to take an integrative approach to the development and validation of integrative concepts and theoretical frameworks, which can be applied regardless of context – whether manufacturing, services or both (Drejer, 2004; Coombs and Miles, 2000; Miles, 2008; Barcet, 2010). Therefore, the study sought to focus on service innovation to gain insights that could contribute to the elaboration of an integrative approach relevant to both product and service innovation processes.

#### **1.2.1.2** Learning from small service organisations

Research on innovation in services has extensively expanded (Drejer, 2004) however the subject remains less understood (Ettlie & Rosenthal, 2011) than product innovation due to a gap within the service innovation literature and theoretical

framing (Miles, 2005; Smedlund, 2008a; Ettlie and Rosenthal, 2011). Despite the recognised economic contribution of the service industry manufacturing based theories are still being applied to most contexts (Damanpour and Aravind, 2006; Dejall et al., 2013). One reason for this is the traditional perception of services as low technology users (Randhawa and Scerri, 2015). This contrasts with perceptions of manufacturing, despite the fact that current technology allows services to be key competitors in the marketplace through the use of interfaced services that operate alongside conventional face-to-face services (Kandampully, 2002).

Concurrently, the literature on service innovation has given extensive attention to research on service innovation outcomes in contrast to innovation processes (Levin and Cross, 2004; Crossan and Apaydin, 2010; Toivonen, 2010). For instance, Gallouj and Weinstein (1997) explore the forms (product/service/process) and modes (incremental/radical) of innovation. Moreover, the work of De Vries (2006) that is based on case studies from the literature emphasises the characteristics of service innovation outcomes. Similarly, Pires et al. (2008) contrast the determinants of product and process innovation, both in manufacturing and services. In a more recent review of literature on innovation, Snyder et al. (2016) also provide a categorisation of the types of service innovation. Nonetheless, some studies have investigated the service innovation process. For instance, Gremyr et al. (2014), who explore the modes of innovation, also investigate the service innovation process in manufacturing, whilst the work of Kelly and Storey (2000) focuses on the management of the innovation process in UK service organisations. Furthermore, Syson and Perks (2004) investigate the innovation process within networks, and Smedlund's (2008a) study considers the service innovation process when seeking to identify types of service innovation. Earlier studies, such as those by Bowers (1989) and Easingwood and Percival (1990), also focused on the innovation process in services. However, these have been undertaken in large service organisations, such as professional services, banking, telecommunication, insurance, and transportation. In contrast to smaller service organisations, these organisations are known to develop production-intensive services and thus, like products, are characterised by their standardised services to users (DeJong and Vermeulen, 2003). Therefore, insights into the service innovation process in small service organisations remain limited.

Overall, the scarcity of literature on service innovation as well as the extensive attention given to the outcomes of service innovation and to large service organisations where offerings are standardised, has evidenced the need for a wider investigation into the innovation process in other contexts, particularly that of smaller service organisations. Therefore, lessons from small service organisations, where technology is fundamental to their activities, could contribute to the body of literature on service innovation, as well as the innovation practice in small digital marketing agencies in the UK.

#### 1.2.2 The task and the internal environment

Organisations do not innovate in isolation for they are reliant on communication and interaction with their environment (Van Hemert et al., 2013). Therefore, by considering both the task environment and the internal environment of organisations the study sought to reflect a more comprehensive picture of innovation (Lee et al., 2010).

#### **1.2.2.1** An illustration of dynamic inter-organisational relationships

The overwhelming scientific approach used to explore organisational relationships means that research has largely prioritised the structural components of relationships (Ahuja, 2000; Capaldo, 2007; Frankenberger et al., 2013). While this has generated key insights on the configuration of social networks, it has led to the conceptualisation of relationships as static systems (Kilduff and Tsai, 2012). To compensate for this structuralist approach, calls have been made to further consider the subjective and qualitative elements of relationships that can illustrate such relationships as dynamic systems (Kilduff and Tsai, 2012). The study acknowledged the qualitative element of relationships to reflect their dynamism; this was on the basis that ignoring the qualities of relationships would lead to a misrepresentation of how these relationships operate (Uzzi and Gillepsie, 2002; Kilduff and Tsai, 2012).

The approach of social capital has extensively been used to investigate organisational relationships. The seminal social capital framework of Nahapiet and Ghoshal (1998) presents a dynamic illustration of organisational relationships that

encompasses a structural, relational, and cognitive dimensions. These three dimensions relate respectively to the structure and the quality of relationships, as well as common understandings in relationships. Whilst the cognitive component has been investigated in social capital studies, it has been less extensively debated in the literature for it relates to a potentially separate and wider topic often associated with the research of organisational strategies (Nahapiet and Ghoshal, 1998).

Increasingly, scholars have emphasised the need to take into account the multidimensionality of social capital through the structural and relational components. They have argued that the application of only one component provides a onedimensional and restricted representation of social capital (Nahapiet and Ghoshal, 1988; Bolino et al., 2002; Koka and Prescott, 2002; Hoang and Antoncic, 2003; Lawson et al., 2008; Carey et al., 2011). Moran (2005) addresses the configuration (structural) and quality (relational) of relationships when measuring the influence of social capital on management performance. His application of both components is based on the view that the structural element alone does not contribute to the theory and effectiveness of social capital. In his analysis of the effect of social capital and organisational structure on the performance of local government, Rhys (2010) applies both structural and relational components with the claim that organisational social capital needs to focus on more than a single dimension. Consequently, the study applied the structural and the relational dimensions of social capital with the aim of presenting a dynamic illustration of organisational relationships.

# **1.2.2.2** Understanding inter-organisational relationships in small service organisations

Studies have often considered the task environment of organisations through the concept of inter-organisational relationships, which have been recognised as critical for providing additional resources and allowing information to be exchanged with clients and other third parties (O'Mahoney, 2011). In addition to their relevance for innovative organisations (DePropris, 2002; Deprey et al., 2012) they are key in fast evolving industries where a wide expertise is often required to innovate services and this is not always available internally (Pérez-Luño et al., 2011). Innovation studies that have investigated inter-organisational relationships have done so in both

manufacturing and services. For instance, Mitrega et al. (2017) relate to interorganisational relationships in the automotive parts industry through the concept of networking in order to measure their positive influence on product innovation and organisational performance. Syson and Perks' (2004) study on social networks and innovation in a large financial service organisation show that through a network approach inter-organisational relationships enhance the innovation process by enabling the coordination of approaches with competitors and better communication with suppliers.

The social capital approach encompasses relationships that are both external (interorganisational) and internal (intra-organisational) to organisations; however within the literature the focus has mostly been on the latter. The comprehensive framework of Nahapiet and Ghoshal (1998) developed from their study of relationships and knowledge on organisational performance considers the relationships that are within an organisation. Furthermore, in the empirical work of Tsai and Ghoshal (1998) on social capital and innovation outcomes the attention is given to the relationships across one large multinational electronic organisation. The work of Sanchez-Famoso et al. (2014) assesses the role of internal networking relationships (social capital) on innovation within family organisations. Likewise, Camps and Marques (2014) explore the influence of social capital on the types of innovation in one particular organisation in the machinery industry.

Studies that have concentrated on the social capital that is external to organisations, such as Koka and Prescott (2002), Inkpen and Tsang (2005), Filieri et al (2014) and Walter et al. (2007) are confined within the scope of networks and strategic alliances where relationships are strategically developed for a particular purpose. Furthermore, a large number of studies have often only considered one component of social capital. For instance, in the quantitative study of Pérez-Luño et al. (2011), which measures the influence of inter-organisational linkage on radical product innovation, the analysis of manufacturing is limited to the relational component of social capital, which results in a one-dimensional and restricted representation of social capital (Nahapiet and Ghoshal, 1988; Bolino et al., 2002)

Overall, the above empirical studies highlight the strong focus on investigating interorganisational relationships in manufacturing and large service organisations as opposed to small service organisations, as well as the focus of social capital on intraorganisational relationships. This made it compelling to seek further understanding on the innovation process and inter-organisational relationships in the context of small service organisations such as small digital marketing agencies. This motivation was reinforced firstly by the evidence that innovation benefited from the relationships of organisations with their task environment in fast evolving industries, which can be applied to digital marketing and secondly by the increasing attention given by organisations and industries on intangible assets such as social capital (Edvardsson et al, 2000; Vargo and Lusch, 2004; Bryan et al., 2017; Osinski et al., 2017), which are key factors in the success and value creation of organisations (Grimaldi et al., 2012). Whilst the use of a multidimensional framework of social capital that includes a structural and relational component illustrates a more dynamic picture of organisational relationships, it remains for empirical innovation studies to apply such frameworks from the perspective of inter-organisational relationships in the context of small services organisations.

#### **1.2.2.3** Considering external and Internal knowledge

It is frequent for innovation studies to consider knowledge, for it is recognised as an antecedent to innovation and as a critical intangible asset to organisations (Subramaniam and Youndt, 2005; McDowell et al., 2018). It is also essential to take knowledge into account when investigating external social capital since knowledge and social capital are intrinsically embedded as knowledge is a resource gained from social relationships and both have a role in innovation (Nahapiet and Ghoshal, 1998; Adler and Kwon, 2002). The relevance of exploring both elements is increasingly recognised in the literature, which has led to a growing number of studies that investigate them jointly (Subramaniam and Youndt, 2005; Wirtz et al., 2010; Pérez-Luño et al., 2011). For instance, Robert et al. (2008) measure the structural and relational elements of social capital with reference to the integration of knowledge and performance in student teams. Their decision to research both jointly is based on their original claim that social capital influences the integration of knowledge in

teams. Their quantitative work set in an educational environment confirms such influence. Similarly, in their study on organisational learning from customer feedback Wirtz et al. (2010) consider both elements stating and confirming that the structural and relational components of social capital enhance the sharing of tacit knowledge.

However, knowledge and social capital have most often been investigated in the context of networks or/and with reference to organisational learning or performance. For instance, the work of Walter et al. (2007) focuses on the acquisition of knowledge from partners in alliance networks. Similarly, the work of Uzzi and Lancaster (2003) investigates the influence of external networks on the transfer of knowledge when seeking to further understand learning between organisations in the financial market. Furthermore, Gurrieri (2008) investigates the dissemination of knowledge within a network of small manufacturing organisations. The literature has also highlighted the influence of knowledge from inter-organisational relationships on the innovation process. For instance, in a Spanish manufacturing setting Herrera et al. (2010) confirm the positive influence of external knowledge on the innovation process. However, these quantitative studies have considered indicators that emphasise the measuring of the overall concept of organisational performance through innovation activities as opposed to the way innovation occurs.

In addition to using knowledge that is sourced externally organisations rely on internally based knowledge that is embedded in organisational skills, abilities and expertise (Stewart, 1999; Coff, 2002; Menon and Pfeffer, 2003; Schweisfurth and Herstatt (2016). This organisational knowledge and its influence on innovation has been extensively recognised and highlighted in empirical studies particularly in manufacturing. For instance, the work of Rundquist (2012) stresses that an innovative performance in manufacturing is influenced by the ability to assimilate knowledge gained through experience. Moreover, Fong Boh et al. (2014) in a multinational manufacturing organisation known to be innovative found that different expertise influences innovation in particular ways in the organisation. Their work is based on the argument that individuals have the capability to recombine knowledge that leads to the generation of innovative ideas. Finally, the work of Subramaniam and Youndt (2005) who consider organisational knowledge as an antecedent to

innovation, argues that innovation and knowledge needs to be further understood. Studies that have considered both the external and internal knowledge jointly with regard to the innovation process are more limited. Schweisfurth and Herstatt (2016) investigate both types of knowledge by considering the employees of an organisation as internal and external users of innovative products. However, similar to Herrera et al (2010) the overall focus is on the measurement of organisational performance through innovation activities, not on the process used to innovate.

The above observations imply that the concept of knowledge is most often investigated in the context of networks and manufacturing and/or with reference to organisational learning and performance. Therefore, this provided the motivation to focus on the innovation process in the light of knowledge in the context of service organisations. This decision was reinforced by the highlighted need to consider knowledge jointly with social capital due to their intrinsic affiliation and influence on innovation. Finally, the study sought to draw particular attention to the properties of knowledge, which have received less empirical attention; instead studies have commonly focused on the creation, transfer and adoption of knowledge, which has thus left the subject in need of further investigation (Phelps et al., 2012).

#### **1.2.2.4** Contributing to structural capital

It is also relevant to take structural capital into account when investigating social and knowledge capital since, as a supportive internal structure structural capital links the internal environment of organisations with the task environment. The capital that is made of systems and organisational practices allows for the capturing and sharing of knowledge, and its communication, internally and externally; this all strengthens the roles of social capital and knowledge as providers of organisational value (Edvinsson and Sullivan, 1996; Edvinsson and Malone, 1997; Stewart, 1999; Zangoueinezhad and Moshabaki, 2008; Grimaldi et al. 2012; Matthies, 2014). Structural capital has been acknowledged in accounting system (Edvinsson, 1997); however, traditionally it has not been viewed as a main asset, like customers and products. Therefore, it remains the most overlooked capital in organisational studies, and as a result the literature on the subject is sparse (Rose, 2014; Gogan et al., 2015).

Structural capital has been explored within the overall framework of intellectual capital (IC) that also includes the components of relational and human capital. Some studies, such as Herremans et al. (2011), have assessed IC as one construct when testing their hypotheses of organisational design and uncertainty with regard to ICrelated decisions. Studies where the element of structural capital has been considered have focused on innovation outcomes and organisational performances, such as the study of Rahim et al., 2011 in the telecom industry and Kamukama (2013) in microfinance organisations. More recent studies have investigated innovation with regard to structural capital, such as McDowell et al. (2018) who measure the correlation between innovation performance and IC in SMEs, or Delgado-Verde et al. (2016) who measure the effect of structural capital on radical innovation in high tech manufacturing organisations. However, only a limited number of studies have investigated the innovation process and structural capital. This does not provide a comprehensive understanding of innovation (Buenechea-Elberdin, 2017). To the knowledge of the researcher the study of Wijayanti et al. (2012), which measures the correlation between structural capital and innovation, is one of the few to consider both concepts jointly. However, similar to knowledge, their reference to the innovation process relates to the achievement of organisational performance through innovation activities as opposed to ways in which innovation is performed.

The limited literature on the subject of structural capital, and the limited focus of empirical studies on the innovation process and structural capital highlighted the need to further contribute to existing literature. Moreover, the bridging nature of structural capital that implied a link between the task and the internal environment of organisations acted as an additional incentive to investigate the innovation process considering structural capital. This was based on the fact that the innovation process relies on both internal and external resources (Van de Ven et al., 2008; Toivonen, 2010; Van Hemert et al., 2013).

#### 1.2.3 Research gap

The evident dynamic between the innovation process, and the influencing social, knowledge and structural capital draws attention to the notion of holism; Castells

(2010) describes holism as the sum through the interaction of interdependent parts. Therefore, the study sought to provide a comprehensive representation of innovation. The acknowledgment that social, knowledge and structural capital have an influence on innovation and the consideration of the internal and task environment of small digital marketing agencies, all aimed to contribute to this representation. Furthermore, the exploration of social capital through a multidimensional framework to present a more realistic image of dynamic social relationships sought to add to this comprehensive picture.

The investigation of innovation and capital in an organisational context has previously been carried out with the use of a comprehensive approach. For instance, the work of Martins and Terblanche (2003) takes into account innovation and creativity, and cultural capital, as they identify and discuss the effect of various determinants of organisational culture on innovation. In addition to the underlying argument that creativity and innovation are influenced by organisational culture, they claim that the most effective way to research cultural capital is through the system approach. This implies the use of a comprehensive approach that allows for the independent investigation of innovation, creativity and organisational culture as well as the components of cultural capital, and the influence between elements and components. Moreover, in their longitudinal assessment of innovation outcomes in large US public organisations Subramaniam and Youndt (2005) apply an intellectual capital (IC) framework to measure the effect of social capital, human capital and structural capital on modes of innovation. They stress the need for further understanding each element and their influence on innovation. The comprehensive framework of their research is based on the recognition that innovation is influenced by key characteristics in each capital, which reinforce and strengthen knowledge. Pérez-Luño et al. (2011) investigate innovation considering external social capital, knowledge, and claim that the use of a comprehensive approach allows for the consideration of the independent and joint effect of social capital, knowledge and innovation. Moreover, they find that it provides a better understanding of the best way to combine external social capital with knowledge tacitness and complexity and thus enhance radical innovation. Nonetheless, the quantitative nature of these studies does not allow for a deeper exploration and understanding of each element and influence (Merriam, 2009).

Therefore, the study sought to present a comprehensive picture of innovation where in this case further understanding was provided on the innovation process, and the influencing elements of social, knowledge and structural capital.

In empirical organisational studies the innovation process is less commonly considered than the topic of innovation outcomes, despite remaining a core thread in the development of innovation theories (Wolfe, 1994; Levin and Cross, 2004; Damanpour et al., 2009; Crossan and Apaydin, 2010). Seminal works that have focused on the innovation process in innovation generation, where organisations engender their innovation, have illustrated a linear process. This is the case in Utterback's (1971) study who, in a technological context, highlights a process comprised of three stages: 'idea generation' (need recognition, design concept/technical proposal), 'problem solving' (goals and priorities, original technical solution or invention), and 'implementation and diffusion' (manufacturing, prototyping, introduction to market). In the process, Utterback acknowledges the implications of the task environment and the general environment through the concepts of technical knowledge and socio-economics. In his model, Robertson (1974) provides a linear process that encompasses the three stages of 'synthesis of need and know how', 'development' (R&D, design, production, marketing) and 'new product'. Recognising the challenge of a linear representation of innovation Robertson reflects the role of the general environment in the process alongside the concepts of socio-economics, and scientific and technical knowledge. Furthermore, Damanpour and Wischnevsky (2006) regard the process of innovation generation as the 'recognition of opportunity', 'R&D', 'testing', 'production', 'marketing and distribution'.

Van de Ven et al. (1999, 2008) shift the traditional linear innovation process by presenting a multiple sequence pattern model (Damanpour and Schneider, 2006) that comprises twelve different characteristics over three main temporal stages: 'initiation, 'development' and 'implementation'. The model underlines five concepts which they see define the innovation process and these are ideas, outcomes, people, transactions, and contexts. The initiation stage refers to the incubation period of innovation, events that may trigger innovation, and planning and budgeting. The development stage contains ten different characteristics, which include the

proliferation of innovation ideas into several ideas and activities, potential setbacks, management behaviour and relationships with investors. These characteristics explicitly bring to light the complexity of innovation. Finally, the implementation stage refers to the integration of innovation and its review by management.

Similar to Utterback (1971) and Robertson (1974), the model of Van de Ven et al. (1999; 2008) recognises the role of the internal and task environments on the innovation process in the form of management, competitors, suppliers and industry players; this is particularly pertinent at the development stage. This recognition and the constituent characteristics of the process illustrate a non-linear process that is dynamic, emergent and unpredictable. However, the framework is developed on the basis of R&D and product innovation, which implies radical innovation. Similar to the above frameworks, this model is not representative of services in that services essentially innovate incrementally and do not tend to undertake R&D activities (Brouwer, 1997, in De Jong and Vermeulen, 2003, p. 845).

In the context of services the models of Bowers (1989) and Edgett and Jones (1991) stress the role of business strategy and market research, and analysis and assessment respectively. Whilst their processes present some characteristics of service innovation only the internal environment of organisations is reflected. Edvardsson et al. (2000) who, despite adopting an integrative approach that supports the notion of network economy and occurrence of technology provide a model that remains internally focused as they consider the implication of organisational strategy and culture and incorporate them as underlying components of the process. Similarly, in the service context of consultancy the model of Heusinkveld and Benders (2002) highlights internal management issues during development as well as work force and other internal resources as integral to the innovation process.

Toivonen (2010), who also adopts an integrative approach to innovation, recognises the three temporal stages in services as innovation generation, development and implementation. She views the stages from three different positions, the traditional sequential approach, the simultaneous functioning of stages, and the recognition of innovation following implementation during service usage. The framework of Toivonen exposes and illustrates the structural nature of the innovation process in services. However, despite the fact that the internal and the task environments are known to be influential to the innovation process (Crossan and Apaydin, 2010; Sundbo, 2010; Chesbrough, 2012) her framework does not consider and reflect any influencing elements from both the internal and the task environment (Crossan and Apaydin, 2010; Sundbo, 2010; Sundbo, 2010; Chesbrough, 2012).

However, the involvement of parties from the task environment such as clients among others is well known to influence the innovation process, particularly in services (Smedlund, 2008a; Jimenez-Zarco et al., 2011; Ommen et al., 2016). This is evidenced, for instance by Smedlund (2008a) who recognises the influence of client relationships at different stages of the innovation process alongside the mode of innovation (radical/incremental), and this leads to a categorisation of services within professional services. The measure of the contributing benefits that these interorganisational relationships generate is enabled through social capital (Syson and Perks, 2004; Kilduff and Tsai, 2012). In addition to social capital, knowledge is known to influence the innovation process, as previously mentioned. For instance, Mahr et al., (2014) recognise the influence of knowledge on the innovation process when measuring the value of co-created knowledge on a product innovation process. Herrera et al. (2010) further highlight the influence of knowledge on the innovation process and the consequent investment of organisations in creating new knowledge. Additionally, structural capital, as a supporting function to social and knowledge capital, influences the innovation process. This was previously highlighted in the research of Wijayanti et al. (2012), who provide one of the few studies to investigate the relationships between innovation process and structural capital.

Although innovation has been investigated along with social capital, knowledge and structural capital, attention has mostly been given to innovation performance, the modes of innovation, and the outcomes of product innovation. For instance, Maurer et al. (2011) recognise the positive influence of intra-organisational relationships and knowledge in their investigation on the impact of innovation performance in manufacturing. Martínez-Cañas et al. (2012) also consider innovation with knowledge and social capital in science and technology parks (STP). They highlight the role of

33

knowledge as mediator between social capital and product innovation. Furthermore, in Spanish organisations Kianto et al. (2017) measure the influential relationship between knowledge, structural capital and innovation performance. Similarly, Bornay-Barrachina et al. (2016) measure the influential interaction between knowledge and social capital with reference to radical and incremental innovation in highly innovative organisations.

However, at a time when organisations focus their attention on intangible resources and where additional understanding of intangible assets is needed (Edvardsson et al., 2000; Gogan et al., 2015; Bryan et al., 2017), there is no theoretical link between the service innovation process and social, knowledge and structural capital that could provide a deeper understanding of service innovation. The study therefore sought to address this gap and to contribute to the current body of knowledge in this subject area.

#### 1.2.4 Methodology

#### **1.2.4.1** A qualitative approach

Whilst a large number of studies have jointly investigated innovation with knowledge and social capital, these have most often been carried out quantitatively. For instance, based at the regional level in Italy, the work of Laursen et al. (2012) measures the influence of social capital on the innovation of manufacturers through the acquisition of higher levels of knowledge. In their study in the engineering industry in Germany Maurer et al. (2011) also measure innovation performance from the effect of social capital and the consequent knowledge transfer in manufacturing. Similarly, Martínez-Cañas et al. (2012) measure the relationship between innovation and social capital through the concept of knowledge acquisition in Spanish science and technology-based organisations. Additional studies on innovation, social capital and knowledge have also used a quantitative approach (Obstfeld, 2005; Maurer et al., 2011; Akhavan and Hosseini, 2016). Furthermore, the study of Wijayanti et al. (2012), one of the few contributions to the literature on innovation process and structural capital carries out a quantitative measurement of the relationship between both concepts. Nonetheless, some studies have applied a qualitative approach; for instance, Bosch-Sijtsema and Henriksson (2014) qualitatively explore inter-organisational relationships and knowledge with regard to innovative projects. However, their case study is specific to the context of the construction industry, and the main focus is on the sharing and management of knowledge by organisations. Grimaldi et al. (2012) also use a qualitative methodology in their exploration of the influence of knowledge, social interactions and structural capital; they use the framework of intellectual capital (IC), to explore value creation through innovation. However, they consider social relationships with stakeholders in the context of communities of innovation (Col), whilst their focal point is one large, Italian, high-tech organisation. Similarly, although Capaldo (2007) qualitative study examined the influence of inter-organisational ties on innovation capability, through the sharing of knowledge and learning, it was conducted in three large furnishing manufacturers within the specific setting of alliance networks. Thus, there is limited evidence within existing empirical studies on service innovation and knowledge, social and structural capital from a qualitative perspective, and this has prompted the adoption of a qualitative research approach aimed at gaining a deeper understanding of each element and its implications.

### **1.3** The aim and objectives of the research

The background to the research highlighted an unclear picture of small digital marketing agencies with regard to their innovation and how they innovate at a time when innovation is essential. Furthermore, the literature review evidenced the limited insight on the innovation process in small service organisations. Finally, the lack of a theoretical link between the service innovation process and social, knowledge and structural capital was underlined.

Therefore, the aim of the research was to understand and gain insight on the innovation process in small digital marketing agencies in the light of social, knowledge and structural capital. Findings were used to provide recommendations intended to strengthen the innovation process in that context.

The aim was divided into several objectives:

- a) To identify the nature of the innovation process in small digital marketing agencies in the UK
- b) To identify the characteristics of social, knowledge and structural capital in small digital marketing agencies in the UK
- c) To examine the implications of social, knowledge and structural capital for the innovation process in small digital marketing agencies in the UK
- d) To evaluate how small digital marketing agencies in the UK can use social, knowledge and structural capital to enhance their innovation process

These objectives were addressed by the following questions:

- What is the nature of the innovation process in small digital marketing agencies in the UK?
- What are the characteristics of social, knowledge and structural capital that affect the innovation process in small digital marketing agencies in the UK?
- What are the implications of social, knowledge and structural capital for the innovation process in small digital marketing agencies in the UK?
- How can small digital marketing agencies in the UK use social, knowledge and structural capital to enhance their innovation process?

## **1.4 Scope of the research**

The concept of a digital industry is difficult to define, as digital also impacts on traditional industries and new digital sectors are also developing (Tech Nation, 2015). The focus of this study is at the organisational level of small digital marketing agencies in the UK, which implies agencies with less than 39 employees. The definition of small digital marketing agencies is based on the UK classification from the Recommended Agency Register (RAR). RAR is part of The Drum, the largest marketing platform in Europe. The RAR classification is as follows:

- Small marketing agencies: up to 39 employees
- Medium marketing agencies: 40 to 99 employees
- Large marketing agencies: Over 100 employees
The revenues of digital companies are lower than the average revenues in the rest of the UK economy (NIESR, 2013). Therefore, the definition of small and medium enterprises provided by the European Union, where small enterprises are considered to have a turnover of up to 10 million euros, was not considered appropriate for the study. The chosen RAR classification was viewed to provide a more accurate representation of the digital marketing agencies in the UK. Furthermore, the RAR register provided a listing of digital marketing agencies (finalists and award winners to the UK RAR Awards) recognised for their achievement and innovation.

Based on the Chartered Institute of Marketing the study referred to digital marketing agencies as organisations specialised in the promotion of brands and/or products and services for client organisations through different digital media. They are included in the knowledge-intensive traded services sector by the UK Government, which also include professional and business services, the information economy and traded aspects of higher and further education (Gov UK, 2012). The wide range of services offered by digital marketing agencies means that their activities spread across the Standard Industrial Classification (SIC) with different classification codes. This research considered small digital marketing agencies that were classified under the following UK SIC codes:

- 46180 Agents specialised in the sale of other particular products
- 58290 Other software publishing
- 61100 Wired telecommunications activities Web Portals (63120)
- 62011 Ready-made interactive leisure and entertainment software development
- 62012 Business and domestic software development
- 62020 Information technology consultancy activities
- 62030 Computer facilities management activities
- 62090 Other information technology and computer service activities
- 73110 Advertising agencies
- 73120 Media representation services
- 74100 Specialised design activities
- 82990 Other business support service activities not elsewhere classified
- 70229 Management consultancy activities other than financial management

The study acknowledges the concept of service innovation on the basis that innovation encompasses, new products, new processes, new services, and new organisational forms; this consideration was based on the Ettlie and Reza's (1992) definition. With regard to the innovation process, Damanpour and Wischnevsky (2006) have established a distinction between the processes of innovation generation and innovation adoption. Therefore, the study acknowledged the innovation process (also referred to as the service innovation process) as that used by small digital marketing agencies to generate innovative services. Furthermore, the study recognises that the service innovation process includes three main stages, which, according to Toivonen (2010), are part of any innovation process, namely: innovation generation (emergence of ideas), innovation development (development of ideas), and innovation implementation (implementation of ideas).

Based on the conceptual distinctions of social capital from Brunie (2009) between relational, collective and generalised social capital the study adopted a relational approach. This approach emphasised that resources were embedded in social relationships and that social relationships enabled access to resources. Social capital can be external and internal to organisations and both are valuable contributors (Coleman, 1988; Adler and Kwon, 2002; Partanen et al, 2008). The focus of the study was on social capital that was external to small digital marketing agencies. This encompassed social relationships with the task environment (inter-organisational relationships) as opposed to internal relationships (intra-organisational relationships). Guided by the framework of Nahapiet and Ghoshal (1998), the structural and relational components of social capital were considered, to highlight the multiple dimensions of social relationships. The structural component was considered in terms of the strength of ties between the agencies and the third parties from their task environment. The strength of ties was explored through the notion of closeness of relationships and the frequency of interaction (Hansen, 1999; Frankenberger et al., 2013). The relational component was considered in terms of the trust in the relationships, which implied the confidence between parties and reflected in behaviours (Dietz and Den Hartog, 2006).

The third cognitive component of the framework, which draws attention to the concept of shared goals, was not explored, as it is more appropriate to studies conducted in the context of networks and with a particular focus on organisational strategy (Nahapiet and Ghoshal, 1998). All the above considerations enabled the study to establish and maintain meaningful limits to the scope of social capital and to define the basis of the social capital that was explored.

The study considered knowledge as a capital, on the basis that intangible assets are relevant to organisations; this was strengthened by the argument that knowledge is one of the two components of capital, with organisations (Marshall, 1965, in Nahapiet and Ghoshal, p.245). Knowledge capital referred to the knowledge that was available to small digital marketing agencies through their relationships with the task environment, and to the knowledge available internally through skills, abilities and expertise (Nahapiet and Ghoshal, 1998; Adler and Kwon, 2002; Coff, 2002; Schweisfurth and Herstatt, 2016). Knowledge capital implied resources and knowing capabilities (Nahapiet and Ghoshal, 1998). The focus of the study was on the properties of knowledge, which were established by the theoretical characteristics of tacit (know-how) and explicit (codified) knowledge, and individual and collective knowledge (Polanyi, 1966; Nonaka, 1994, and Spender and Grant, 1996).

The concept of structural capital draws particular attention to the understanding of knowledge and social relationships as a creator of organisational value (Edvinsson and Sullivan, 1996; Edvinsson and Malone, 1997; Peppard and Rylander, 2001; Matthies, 2014). The study acknowledged that structural capital is both tangible and intangible and respectively consists of practices and ICT-based systems; these are used to capture and communicate knowledge internally and with the task environment, and to establish better communication with the task environment (Edvinsson, 1997; Zangoueinezhad and Moshabaki, 2008; Gogan et al. 2015; Kianto et al., 2017).

# 1.5 Research Methodology

The research methodology chapter (Chapter 3) links the theoretical references on the innovation process, and social, knowledge and structural capital with the empirical

exploration of each element and their relationships. The characteristics of each element were identified in the context of small digital marketing agencies. The implication of social, knowledge and structural capital on the innovation process was examined. Furthermore, the use of social, knowledge and structural capital to enhance the innovation process was evaluated.

This chapter provided a detailed description of the research process following Saunders et al. (2015) and Van de Ven (2007) to support the thinking and the decisions made to create a solid and coherent design. The research approach and techniques for the collection and analysis of data were applied correspondingly within the constructivist philosophical stance of the research. The literature review helped to refine the focus of the research and frame its purpose. This exploratory study therefore aimed to gain further understanding of the service innovation process, and social, knowledge and structural capital by determining their characteristics and their implications on the innovation process. A multi-method qualitative approach was used that included multiple case studies and expert interview methods. Thirteen case studies provided an in depth exploration in a real-life setting, alongside the review of documents, and thirteen expert interviews; these all contributed to achieve the aim and objectives of the study.

The use of semi-structured interviews for the collection of data suited the exploratory purpose of the research in collecting rich and detailed contextual data, and thus combining flexibility with a guided approach. A total of thirty interviews were conducted that underlined the four main themes of the innovation process, and social, knowledge and structural capital. Key questions were developed following the literature review and a thematic analysis method was used, which consisted of the identification of themes and patterns of meaning across data in relation to the research objectives. Several stages in the analysis were followed amongst which were the transcription, coding, identification and review of themes, and writing of the analysis.

The application of the criteria of construct validity and reliability ensured a rigorous research process. Construct validity was evidenced though methodological

triangulation, using case studies and expert interviews as methods to complement and substantiate some of the findings. Data triangulation was also achieved through the multiple data sources of a literature review, interviews and secondary documents. The criterion of validity was considered through the trustworthiness of the methods, which was achieved by a constant procedure prior, during and after the collection of data. A study map of the research methodology is shown in Figure 10.

## **1.6 Contribution**

The contributions of the study are theoretical, methodological and practical. First, the research was developed on the lines of studies of innovation, social capital, knowledge and structural capital and therefore provided an illustration of innovation that was arguably more comprehensive than previous studies. Furthermore, a theoretical link was established between all the different elements, which addressed the gap highlighted in the literature. The new insights gained from the study of small service organisations and their innovation process where technology is fundamental, contributed to the development of an integrative approach to innovation theories that seeks to be relevant to both product and services.

The exploration of the relational and structural components of social capital contributed to provide a more detailed representation of social relationships. This was a response to the call from scholars to consider both components to illustrate social relationships as a dynamic system. The use of expert interviews as a research methodology also generated new insights to the discussion on methodological triangulation in qualitative studies. Furthermore, the study highlighted that the number of case studies was adapted to the particular context of small digital marketing agencies and the broad nature of their activities, which was reflected in the industry classification. This draws attention that the chosen number of cases is reliant on the industry and type of organisation. Finally, the study provided some practical recommendations aimed at enhancing the innovation process in small digital marketing agencies, and contributed further to the development and implementation of policies on service innovation by drawing attention to the implications of interorganisational relationships, knowledge, and systems and practices on the innovation process.

# 1.7 Organisation of the thesis

This introductory chapter has highlighted the rationale and aim for the research and the subsequent chapters are organised as follows:

## Chapter 2: Theoretical background

Chapter two provides an insight into the literature and discussion on the theories that inform the research. This first part of this chapter reviews the findings and theoretical contributions to the topic of innovation and the innovation process. The second part reviews the findings and theoretical contributions to the topic of social capital. The third part reviews the findings and theoretical contributions to the topic of knowledge and the fourth part reviews the findings and theoretical contributions to the topic of social capital structural capital.

### Chapter 3: Research Methodology

Chapter three provides a description of the research methodology. The philosophical assumptions and consequent approaches and strategies are highlighted. Techniques and procedures to collect data are also highlighted, as is the data analysis process. Furthermore, justifications are made throughout the chapter with regard to the choices that were made to formulate the research design.

### Chapter 4: Research findings – Case studies

Chapter four presents the key findings of the case studies that resulted from within and cross case analysis. The findings of the cross case analysis are discussed in relation to the theory from the literature review.

### Chapter 5: Research findings – Expert Interviews

The chapter presents the key findings from the expert interviews. Recommendations to enhance the innovation process in small digital marketing agencies are provided. The findings are discussed in relation to the theory from the literature review.

### Chapter 6: Conclusions

The chapter draws conclusions to the study with a summary of the aim and objectives and the key results. The limitations of the research and possible future research directions are highlighted, as is the contribution of this study.

# **1.8 Summary and Link**

This introductory chapter provided the background and context of the study with the theoretical and empirical rationale for the research. A theoretical gap was highlighted and the aim of the research was consequently offered with several objectives for the study. The scope of the research was highlighted and a review of the methodology applied was provided. The following chapter establishes the theoretical background of the study based on the discussion on literature concerning the topics of innovation and the innovation process, and social, knowledge and structural capital.

## Chapter 2 – Theoretical Background

## 2.1 Introduction

The previous chapter provided some background and context for the study as well as the structure of the thesis. Chapter 2 reviews and discusses the literature and is organised as follows: the literature on innovation is first discussed, followed by a discussion on innovation in services and then on the innovation process. Following this, literature on inter-organisational relationships is explored through the concept of social capital, and the discussion then focuses on the structural and relational components of social capital. The next section reviews literature on knowledge, which is discussed with particular emphasis on the tacit and explicit characteristics of knowledge as well as collective and individual characteristics. Finally, structural capital is explored with a particular focus on tangible and intangible structural capital. Finally, the theoretical underpinning of this study is presented and justified.

## 2.2 Innovation

The economist Joseph Schumpeter (1939) highlighted the concept of innovation when referring to the need for 'newness' with reference to products, technologies and organisations to remain competitive. Schumpeter (1939, p. 84) considered newness as "the setting up of a new production function", that "covers the case of a new commodity, as well as those of a new form of organization such as a merger, of the opening up of new markets, and so on". However, the concept of innovation is broad and the literature extensive, which therefore requires a focus on relevant areas (Vad Baunsgaard and Clegg, 2015). With regard to the definition of innovation, early organisational studies saw innovation as meaning that leading organisations carry the risk in adopting new ideas or taking risks for success; this referred to the level of acceptance of new ideas within an organisation (Rowe and Boise, 1974). Others have emphasised the relevance and potential of innovation; for instance, Drucker (2002, p.96) defines it as "the effort to create purposeful, focused change in an enterprise' economic or social potential". Besides, Gopalakrishnan and Damanpour (1997, p. 15) consider innovation as a "key means of adapting to change", while a

leading innovation theorist, Chris Freeman, suggests, "not to innovate is to die" (Freeman and Soete, 1997, p. 266).

Over time, the terms have been more succinctly explained as the generation and adoption of new products, services, ideas, technologies, processes, administrative practices and behaviors have emerged (Aiken and Hage, 1971; Damanpour 1988; Hage, 1999). Damanpour (1991, p. 556) refers to innovation as "a new product or service, a new production process technology, a new structure or administrative system, or a new plan of programme pertaining to organizational members". His definition acknowledges both the elements of 'newness' and 'services'. Ettlie and Reza (1992) provide a similar definition but more concise, as they refer to new products, new processes, new services, and new organisational forms; this definition is therefore applied in the study.

However, the debate in the literature on defining innovation is on-going and either encompasses a large number of elements within the concept, such as products, services, process, market, knowledge and culture, among others, or the need to consider context and the understanding of 'newness' (Vad Baunsgaard and Clegg, 2015). Some scholars have added to the debate by arguing that any change can be regarded as innovation (Hansen and Wakonen, 1997, cited in Crossan and Apaydin, 2010, p. 1155), and further aspects, such as diffusion, successful implementation or necessity and intentionality (Crossan and Apaydin, 2010), also need to be taken into account.

Nonetheless, innovation has been extensively explored in organisational studies and is considered an essential source of economic growth and competitive advantage (Gallouj and Weinstein, 1997; Sundbo, 1997; Tidd et al., 2001). However, the derivation of most definitions and conceptualisations on innovation has emerged from the fields of economics and technology, in manufacturing, which has traditionally focused on this research area (Gallouj and Weinstein, 1997; Miles, 2005; Hipp, 2010). One reason for the focus is the typical perception of services as low technology users (Randhawa and Scerri, 2015) even though today's technological developments provide technology-based, as well as conventional face-to-face

services (Kandampully, 2002). Consequently, the literature on service innovation remains "fragmented ... and isolated" (Howell, 2010, p. 68) although it is also described as emergent and expanding across different fields such as marketing, economics and management (Macaulay et al., 2012). This trend is confirmed by Macaulay et al. (2012) who describe the increasing interest of services in research, with the "service innovation" citation in study titles increasing from 24 between 1990 and 1999, to 500 between 2000 and 2009.

### 2.2.1 Service Innovation

### 2.2.1.1 Three main analytical approaches

Services have traditionally been under-explored with regard to innovation until scholars such as Barras (1986), drew attention to the concept. Barras achieved this by focusing on the relationship between services and technology through his "reverse product cycle" model. Barras' analytical approach is referenced in the literature as 'technologist' (Gallouj and Weinstein, 1997; De Vries, 2006) and implies that technology and technological development, particularly information technologies, are a requirement for innovation. Further analytical approaches have been used, which characterise the study of service innovation, and these are assimilation, demarcation and synthesis (Gallouj, 1998; Coombs and Miles, 2000; Drejer, 2004).

The assimilation approach considers service innovation from a manufacturing viewpoint and supports the view that theoretical frameworks can be used to explore one or the other. Its strong emphasis on technology means that it is often associated with technologists. This perspective, which is still the most used in innovation studies (Howell, 2010; Dejall et al., 2013) is reflected, for instance in the work of Miozzo and Soete (2001) who categorise service organisations in a manufacturing framework. This is based on their technological relationships to manufacturing and other service sectors, which are 'supplier dominated' (Restaurants, Education), 'informative and physical networks' (Finance, Transport) and 'specialised suppliers and science-based sector' (Software, Business Services). Similarly, the work of Evangelista (2000) on the nature of innovation in services, which, despite recognising the difficulty in generalising service innovation focuses on analysing similarities and differences with technological change in manufacturing.

However, some studies have argued against assimilation claiming that service innovation is more focused on management processes, customised solutions, marketing and human capital (Djellal and Gallouj, 2001) and that a strong focus on technology imposes limitations on the description of both services and manufacturing (Drejer, 2004). Therefore, both technological and non-technological perspectives should be taken into account (Camacho and Rodriguez, 2005) for they are likely to provide a broader and more open consideration of innovation, similar to those reflected in Schumpeter's original definition (Gallouj and Weinstein, 1997).

In contrast to assimilation, the demarcation approach emphasises the particularities of services, with the argument that theoretical concepts developed in manufacturing cannot be applied to services and that new tools and theories are needed to understand the dynamics of innovation. Sundbo (1997) is recognised as a leading scholar in the move to establish service innovation as a separate field of research from product innovation. Similarly, the work of Galloui (1998) draws attention to the specificity of service innovation by highlighting the particular characteristics of ad-hoc innovation in consultancy services. Demarcation is further extended with Djellal and Gallouj (2001) who, in addition to product and process also consider internal organisational innovation and external relational innovation. Furthermore. Damanpour et al.'s (2009) study in the public sector finds that frameworks based on capabilities have more influence on innovation performance than frameworks that consider product and technologies. However, although the nature of innovation in the public sector is particularly diverse, it should not be considered unique, and therefore requires a more cohesive (and less divisive) interpretation of innovation (Diellal et al., 2013).

In addition to the specificity of innovation, the demarcation approach emphasises the specificities of services. These were first highlighted in the sectors of banking, insurance and consulting due to their high levels of service intangibility and interactivities; however, the focus then changed to operational services, such as transport (Djellal et al., 2013). Grönroos (1990) first draws attention to the characteristics of services highlighting that most often services cannot be stored and are consumed at the time of production. Most recurring characteristics highlighted in

studies have included IHIP, which stands for the concept of Inseparability (of production and consumption), Heterogeneity (need for human effort and interaction), Intangibility (or immateriality), and Perishability (service cannot be kept) (Hipp, 2008). However, in their marketing study, Lovelock and Gummesson (2004) question the overall consensus that these characteristics differentiate between services and goods. Based on a thorough exploration of the limitations of the IHIP framework, they claim that it cannot be generalised to all services for these are different based on whether exchanges allocate ownership from suppliers to users, or provide temporary ownership to users.

However Djellal et al.'s (2013) call for a combined interpretation of innovation draws attention to the relevance of innovation in both services and manufacturing, which relates to the synthesis approach. This integrative perspective, that is still at an early stage and needs further development (Gallouj and Savona, 2010) considers that service innovation contributes to the theoretical field of innovation and that service characteristics must be part of a compatible framework (Droege et al. 2009; Gallouj and Savona, 2010). Such a synthesised model assumes similar underlying mechanisms of innovation but anticipates differences in the importance of its dimensions depending on the manufacturing or service innovation context.

The concept of a compatible framework is illustrated in Camacho and Rodriguez (2005) who explore service innovation in a Spanish production system with regard to innovation performance. Although their study does not consider manufacturing but rather service organisations, by focusing their attention on the characteristics of innovation processes across the whole service sector, it shows the relevance of services to innovation processes and their consequent contribution to the wider economy.

### 2.2.1.2 The dimensions of service innovation

In their literature review on organisational innovation, Crossan and Apaydin (2010) provide a comprehensive multidimensional innovation framework that clearly distinguishes between innovation as a process (how) and innovation as an outcome (what), offering a clear illustration of the different innovation facets. However, while the framework considers the concept of services it also reflects the traditional

manufacturing principle of supply where innovation is seen as a sequential activity encompassing the consecutive stages of determinants, processes and outcomes within which innovation components are unconnected. Others have presented a more dynamic illustration of service innovation dimensions. For instance, in the context of knowledge intensive business services the model by Den Hertog et al. (2000) considers six dimensions. These dimensions are: New service concept, new customer interaction, new business partner, new revenue model, new delivery system (personnel, organisation, culture) and new delivery system (technological), and take into account the role of customers, as an innovation source. Their framework is based on the notion that organisational capabilities are considered dynamics and embedded in service innovation since services are less tangible. The individual and combined dimensions have the potential to lead to new or redefined service roles, which affect service offerings and consequently require new organisational capabilities.

Service innovation is therefore an experience or a solution that results in outcomes, such as new services, a service portfolio or processes that creates value for customers. Although the conceptual model reinforces the contribution and relevance of service innovation, Den Hertog acknowledges the need for further improvement and testing. Den Hertog et al. (2010), who provide an updated model based on this original framework similarly, consider the need for further improvements that would distinguish between the size and type of organisations in order to more appropriately manage service innovation.

Similarly, from a service dominant logic (SDL) perspective, Barcet (1996; 2010) provides a more dynamic illustration in the perception of innovation as a link between the customer and service provider. His framework is divided into four different levels; customer expectation (for who), concept (what), innovation (how), methods and resources (with what and whom), and available resources. For innovation to be successful, each level, which represents an aspect of innovation, must appear as a whole. By acknowledging the role of the user and service provider in the innovation process Barcet provides a compatible model of innovation dimensions that integrates the 'supply' element, a characteristic of product innovation with 'demand', which is the main focus of demarcation studies (Gallouj and Savona, 2010).

Others regard service innovation from an evolutionary perspective. For instance, Potts and Mandeville (2007) claim that the service sector is the main contributor to the current digital related economy based on the occurrence and development of ICT, on which knowledge-related service organisations rely in order to innovate. Potts and Mandeville (2007) contrast a conventional innovation model with an evolutionary based one, which they refer to as informational. The latter is described as non-linear, reliant on information from different sources, collaborative, and that accentuates intangible elements as well as the flow of knowledge.

### 2.2.1.3 The New Paradigm

The move to consider a representation of innovation as more dynamic, as well as increased demands for an integrated conceptualisation of service innovation is reflective of wider economic changes. For instance, Coombs and Miles (2000) acknowledge both the assimilation and demarcation approaches, where services use new technologies to innovate but are also intangible and highly interactive, especially between service provider and client. However, they nonetheless believe that an alternative integrative approach is better adapted to today's economy. They argue that the traditional roles of manufacturing and services are in fact more interlinked and that organisations can operate both, implying the need for a single innovation policy. Their conception of innovation is reframed with market relationships as the core element within the dimensions of technology and commodity.

The converging trend between services and manufacturing highlighted by Coombs and Miles (2000), is referenced in the literature through the rising occurrence of services in non-service sectors, 'administrative-like' processes and 'product-like' services in service organisations (Miles, 2000; Den Hertog, 2000, 2010; Sundbo, 2001; Bracet, 2010;), and the reframing of business models from product to service organisations (Chesbrough, 2012). Although some scholars argue against the possibility of a total convergence between industry and services (Hipp, 2010), the trend towards closer links is nonetheless widely acknowledged. This trend reinforces the argument for a stronger focus on the characteristics of innovation, irrespective of context (Preissl, 2000; Hipp and Grupp, 2005), and similarly on the implication of further understanding service innovation, which can later be used for future overall measurement (Coombes and Miles, 2000).

#### 2.2.2 Innovation outcomes

The traditional focus on the effect of technology on innovation has led most studies to examine innovation outcomes, in particular the magnitude of innovation (radical/incremental) and the forms of product/service and process innovation (Gallouj and Weinstein, 1997; Damanpour and Gopalakrishnan, 2001; Hipp and Grupp, 2005; Damanpour and Aravind, 2006; Crossan and Apaydin, 2010; Toivonen, 2010). For instance, studies, such as Gallouj and Weinstein (1997), explore the form (product/service/process) and magnitude (incremental/radical) of innovation. The work of De Vries (2006), which is based on case studies from the literature, draws attention to the characteristics of service outcomes. Similarly, the study of Pires et al. (2008) focuses on the determinants of product and process innovation, both in manufacturing and services. Additionally, the literature review of Snyder et al. (2016) on service innovation studies emphasises the categorisation of service innovation. Thus, several interpretations of innovation outcomes have been identified based on the different analytical approaches that have been followed. These approaches are discussed in the following sections.

### 2.2.2.1 The assimilation approach

In an organisational context Porter (1996) distinguishes between product and process innovation based on the argument that strategy is about doing something different or doing something differently. He sees product innovation as offering something that no competitors can offer, and process innovation as the adoption of new ways of developing and/or delivering products and services. Van de Ven et al. (1999) strengthen this distinction by considering innovation a successful product, process or service. The traditional manufacturing approach of product and process is highlighted in Utterback and Abernathy's (1975) seminal innovation model, which acknowledges that products are first developed and brought to the market before attention is given to the process to enhance production efficiency and costs reduction. However, with the argument that the model does not take services into account, Barras (1986) develops the 'reverse product cycle' (RPC) model, based on case studies undertaken in the context of insurance, accountancy and local government. His model includes three innovation stages: incremental process

innovation to enhance the efficiency of existing services, radical process innovation to improve the quality or effectiveness of existing services, and product innovation that results in the development of new service products that can be differentiated in the market. By considering that particular technologies evolve throughout each of the three stages, Barras implies that, similar to products, service innovation is technology-dependent. However, a large number of scholars have argued that this is not systematically the case since services most often rely on professionalism, and technology is only one route among others (Gallouj, 1998; Den Hertog, 2000; Miles, 2000; Camacho and Rodriguez, 2005; Gallouj and Savona, 2010). With regard to the digital marketing industry Ryan (2014) applies Barras' (1986) described course of action where first a new technology emerges and then, as it becomes more widespread, marketers consider how it can be applied with reference to their target audience; this subsequently leads to new marketing services.

Although both models are considered from an industrial perspective, studies have examined the traditional model of product/service and process innovation at an organisational level. In manufacturing studies these have traditionally been defined and acknowledged within the boundary of R&D functions (Damanpour et al., 2009). While there is more limited literature with regard to services, these have nonetheless still been researched. For instance, Boone's (2000) explores the effect of technology process innovation on service innovation. Her particular focus on technology-related process is based on the rationale that the role of the Internet in new service delivery is constantly increasing. Interestingly, Boone's study highlights the link between knowledge and innovation outcomes as she finds that knowledge is relevant to technology-related process innovation and sees process as a tool that enables the compilation of knowledge on customers. Moreover, she adds that good coordination between business units is key to enhancing the possibility of successful service innovation and that, in contrast to product innovation the development of new service innovation is less structured and less formal, which makes the study of service innovation particularly difficult.

In the context of US commercial banks, Damanpour and Gopalakrishnan (2001) use both the Product Life Cycle (PLC) and Reverse Product Cycle (RPC) models to look at the pattern of process and service innovation adoption. Their consideration of process innovation is particularly reminiscent of manufacturing as it encompasses the notions of 'material' and 'mechanism' in the delivery and production of services. They argue that a distinction between process and service innovation is relevant since each entails different organisational skills. Meanwhile, as well as designing and producing, service innovation requires an understanding of customers' needs whilst process innovation requires the application of technology to enhance product development and commercialisation. In the context of the study, they find that there is a higher adoption of product than process innovation, and that products are adopted before process innovation occurs. Furthermore, successful organisations tend to undertake a more even level of product and process innovation.

Pires et al. (2008), who seek to establish the distinction between innovation in services and manufacturing in Portugal by focusing on the determinants of product/service and process innovation, find that service organisations are considered service innovators rather than process innovators, and are more focused on external cooperation than manufacturers. This contrasts with Damanpour and Aravind (2006) who argue that service organisations are more focused on process innovation, which is likely to be based on the technologist principles developed by Barras. With regard to process innovation, which they refer to as the process of production, service delivery and product distribution, Pires et al. (2008) find that learning-by-doing is most important in services and that the capacity to absorb knowledge developed elsewhere is relevant for innovation. This capacity is relative to the level of education in the organisation as well as level of training activities undertaken.

In a local authority context, Damanpour et al. (2009) focus on the effect of adopting service and process innovation in service organisations. By taking into account administrative types of process in addition to technological process innovations, they provide a stronger emphasis on services by widening the concept of innovation, where attention is drawn to the notion of organisational-related innovation and technology, and to the effective use of organisational resources, which are seen as more representative of services. Although the quantitative measures of the study do not allow for insight into how innovation adoption is affected, the findings show the

importance of adopting different types of innovation for service organisations, which are found to be more effective on their performances.

### 2.2.2.2 The demarcation approach

While the forms of process and product/service innovation are extensively acknowledged in studies, scholars who emphasise the influence of service characteristics in innovation and percieve service innovation as non technological have argued that it is difficult to consider both for these cannot be differentiated in a service context. However, it can be argued that this differentiation depends on how the concept of 'service' is understood, in that, if it includes the notion of service provision, service and process will be identical (Gallouj and Weinstein, 1997). Nevertheless, the demarcation approach has lead to the identification of different typologies of service innovation outcomes.

Gadrey and Gallouj's (1998) seminal demarcation study in consultancy services that follows the work of Gallouj (1991), identifies ad-hoc innovations, where a solution is developed jointly with clients to solve a particular problem, new expertise-field innovation that refers to the provision of advice in an emerging field of knowledge, and formalisation innovations, where mechanisms in the form of new methods and technical equipment are used to better outline services. Gadrey and Gallouj move from the traditional consideration of product-process innovation and technology by stressing the relational element between service providers and clients. The dimension of relationship is particularly highlighted with reference to the relevance of interface in ad-hoc innovation, which they see as the most usual type of innovation in consultancy services. They argue that, in this context, product-process innovation does not have meaning since interface is a focal point and source of innovation. However, taking client relationships into account as source of innovation does not consider other types of relationships with other third parties. Types of services that do not systematically encompass technologies have also been developed in studies from other service sectors such as transport, cleaning and tourism (Sundbo et al., 2007).

The notion of interface is further highlighted in Smedlund (2008a) whose study (also

in professional services) identifies innovation as experimental, tactical and a high potential service. These innovations are all based on the strength of client relationship and the degree of innovation, incremental or radical, which enables the provision of a multidimensional perspective of innovation in that particular context. Smedlund stresses that innovation happens when delivering services and not in the development of services that are in-house before commercialisation.

Further types of services have been developed based on the demarcation approach that focuses on service as a concept. For instance, in financial services Avlonitis et al. (2001) provide a categorisation of six different innovations, which are new to-themarket services, new-to-the-company services, new delivery processes, service modifications, service line extensions, and service repositioning. Furthermore, Gadrey et al. (1995), (also in financial services) identify innovation as service products, architectural innovation where the component of services changes but not the structure, existing service products, the modification of existing service product and process, and organisational innovation for existing products. The seminal conceptual work by Den Hertog (2000) presents five forms of service innovation in Knowledge Intensive Business Services (KIBS), which includes the service concept, client interface, service delivery system/organisation and technological option. Den Hertog sees different types of interactions taking place within the interface dimension: one at production level, where there is no boundary between service providers and service users, and the other at delivery level, among others contributors.

One characteristic of the studies by Avlonitis et al. (2001), Gadrey et al. (1995) and Den Hertog (2000) is the view that innovation results from the combination of different dimensions. Undoubtedly, their demarcation approaches broaden the concept of innovation by providing additional dimensions particular to services and less linear conceptualisations of innovation. Nonetheless, this study argues that their frameworks still display the traditional dimensions of service and process innovation. This is noticeable, for instance, in the model by Den Hertog that stresses the concept of organisational systems and capabilities in the delivery of services; this is referred to as an internal organisational arrangement that includes new forms, capabilities and the skills necessary to enhance performance and the delivery of new services. Moreover, the model stresses a technological option dimension based on the recognition of multiple links between service innovation and technology. Therefore, Den Hertog's conceptualisation of service innovation, while more dynamic, is somehow reminiscent of the traditional conceptualisation of service and process innovations, which are seen in the work of Damanpour et al. (2009) and distinguish between administrative and technological processes.

#### 2.2.2.3 The integrative approach

The specificity of services in demarcation studies help to provide a clearer and more complete understanding of innovation; these form a part of integrative approaches and frameworks (De Vries, 2006). The integrative approach can be identified in studies, such as that by Miles et al. (1994), who identify the forms of innovation in services as product, process and delivery innovation. Process innovation is enabled by new technology whilst product innovation derives from process innovation and as a result of new customer demands; meanwhile delivery innovation relates to innovation within the interactive stages of services between organisations and their clients. Gallouj and Weinstein's (1997) study is also one of the first integrative works to regard service and product indistinctively as well as technological and nontechnological forms of innovation. Building on the work of Saviotti and Metcalfe (1984), they provide a representation of service innovation based on the characteristics of services, which encompass final and technical service characteristics. They also include a dimension of supplier and user competence, which they understand to be activated by technical characteristics in order to achieve a particular array of final characteristics. Fundamentally, they regard the service concept as the service, which is seen as such by end users, and comprised of final characteristics, which are the result of a combination of different technical characteristics.

Gallouj and Weinstein (1997), who focus on the content of service innovation, present a framework that takes the key relational element of services into consideration as well as the complexity of distinguishing between process and

technical innovation. Accordingly, they highlight the notion of back office (organisational process) and front office (in contact with users) where process relates to tangible or intangible back office technical characteristics and client interface relates to tangible and intangible front office technical characteristics. Although back office is technology process (coding) and front office (design) both are still process nonetheless, which be identified in DMA coding and design. Based on this interpretation they develop a service innovation typology that includes radical, improvement, incremental, ad-hoc, recombinative, and formalisation innovation. Consequently, the typology of Gallouj and Weinstein (1997) is adapted into a reframed representation of innovation, which is compatible for both products and services.

However, the framework of Gallouj and Weinstein (1997) is not fully representative of more recent patterns of innovation. In fact, De Vries (2006), who tests the framework in service industries using four case studies and cases from the literature, provides an updated version. Based on his findings, De Vries (2006) shows the networking trend of service organisations with regard to innovation, where competencies and technical characteristics are combined in what he refers to as the network of organisations, and that clients use their own technology to co-produce and communicate with service providers. Accordingly, the dimension of 'several' providers' competencies is added to the framework (instead of only 'one' provider), and the dimension of 'user' technical characteristics and 'provider' technical characteristics are also included. Moreover, De Vries (2006) recognises four, instead of six, types of innovation, which are radical, incremental, ad hoc and recombinative/architectural innovation.

Therefore, the integrative approach of Gallouj and Weinstein (1997) and De Vries (2006) and their understanding of services through the concept of service characteristics allow for the consideration of process innovation within a service context. This provides a more accurate picture of today's organisational innovation while strengthening the view that assimilation and demarcation studies, which have helped to establish the particularities of service innovation are no longer considered relevant (Droege et al., 2009).

Interestingly, some studies, such as that by Chae (2012), use complexity theory to highlight a perspective that considers service innovation as an evolutionary process. The approach offers a representation of service innovation as versatile and multidimensional drawing attention to the notions of interaction, and locality as well as emergence and unpredictability. Chae finds eight types of service innovation that result from the combination of two service variation mechanisms (minor and major), and three dimensions, customer, supplier and geographical. Nevertheless, although the framework provides a new consideration of service innovation, Chae recognises the need for further practical refinement to develop a process that helps in selecting the potentially most successful variations. Thus, whilst there is evidence of the attention given to service innovation outcomes (Crossan and Apaydin, 2010; Toivonen, 2010) the literature nonetheless provides some insight on the innovation process.

Damanpour and Wischnevsky (2006) distinguish between the process of innovation generation and the process of innovation adoption. The former relates to innovations that can be new to organisations, as well as to others already operating within the same context: it also generates new products/services, processes and practices. In contrast, the latter relates to innovation that are generated externally and subsequently acquired and implemented by organisations; these have a particular aim to create changes in an organisation. Based on this distinction, the study defines the service innovation process as that which generates new services, as well as internal processes and organisational forms. This is particularly appropriate to small digital marketing agencies, whose main purpose is to offer new tailored services to clients, as well as to enhance their organisational processes and practices.

#### 2.2.3 The innovation process

Despite the fact that some services can be physically represented and require operations that are similar to manufacturing the literature on innovation process in services remains limited (Crossan and Apaydin, 2010; Garud et al., 2013). One explanation is that the innovation process in services is viewed as more complex and that generally services remain more challenging to standardise for they are less tangible (Sundbo, 2010). To better understand the innovation process, it is relevant to understand the theoretical assumptions that are made in the literature. One significant stage in the evolution of innovation theory is the shift in the perception of knowledge from a concrete and transactional concept, to understanding its social contribution; this shift allows for process model theories to emerge (Edwards et al., 2005). Subsequently, the consecutive development of innovation process theories can be observed through three main foci concerning innovation research in organisations: the diffusion of innovation, the determinants of innovativeness and the process of innovation (Wolfe, 1994).

The first strand of research focuses on the diffusion of innovation and consider the "rates and patterns of innovation adoption over time and/or space" (Wolfe, 1994, p.407). Rogers (1995) explains diffusion as the process of communicating innovation through different channels over time in order for members of a social system to adopt it. At a later stage, Rogers distinguishes the concept of diffusion with innovation adoption, which he later refers to as the decision of individuals or organisations to make use of an innovation. The evolution of the diffusion of innovation theory over the years has been based on the increasing need to consider the whole organisational setting, which has led to the consequent change in the unit of analysis from individual to organisational (Rogers, 1995). Undoubtedly, this shift has enhanced the validity of research findings since Wolfe (1994) suggests that the dynamic nature of innovation makes it impossible to ignore the numerous organisational forces that can impact the innovation process.

However, the theory of diffusion is not without limitations since it implies that innovation is successfully implemented and works efficiently, but that users are passive agents who wait for innovation to be implemented (Clark, 2003). Furthermore, it evidences the need for the further use of qualitative approaches, as it is difficult to fully measure what generates the adoption of innovation (Damanpour, 1996). Nonetheless, the concept has been a positive contribution to organisations in area such as marketing, where it has provided some understanding of the factors that contribute to innovation adoption Frambach and Schillewaert (2002). Despite this, growing interest in innovation processes has encouraged researchers to consider the whole process of innovation in organisations over time (Rogers, 1995).

The second strand of research focuses on organisational innovativeness, which looks at the characteristics of innovative organisations and seeks to identify what influences organisations with predispositions to innovate (Wolfe, 1994). A predisposition to innovate is most often considered in relation to the number of innovations undertaken by organisations (Daft, 1978, cited in Wolfe, 1994). However, a quantitative focus in measuring innovativeness has posed some restrictions; moreover, the usefulness of such measurements for this particular area can be questioned in that they have often neglected to consider innovation over a period of time (Rogers, 1995).

Nevertheless, a predisposition to innovate has been further explored through the structural characteristics of organisations, whose approaches have provided some extensive and relevant insights. For instance, a large number of studies have acknowledged and supported findings on the positive impact of organic structure on innovation (Aiken and Hage, 1971; Mintzeberg, 1979; Hage 1999). Mintzberg (1979) claims that traditional organisational structures can only fully support simple, rather than complex, innovations, and underlines the need for more organic and less bureaucratic structures, which he refers to as Adhocracies. Focusing on structural characteristics provides a comprehensive investigation of the predisposition of organisational to innovate as it implies the consideration of a broader organisational perspective such as labour, management and business divisions among others (Mintzberg, 1979).

The third strand of research focuses on the process of innovation, which investigates the different processes that organisations follow to innovate. This is the "how and why innovations emerge, develop, grow, and (perhaps) terminate..." (Wolfe, 1994, p.409). Innovation studies have been characterised by their difficulty in bringing findings together (Wolfe, 1994); as such, research has instead tended to focus on different components of these processes (Gopalakrishnan and Damanpour, 1997). The literature therefore tends to highlights studies that have focussed on the processes used by organisations to adopt an innovation, and the processes used to generate innovation within organisations.

Traditionally, seminal works that have focused on innovation adoption, where organisations assimilate innovation, have provided an illustration of the process that is linear and sequential, and is referred to as unitary sequence patterns (Damanpour and Schneider, 2006). For instance, Daft (1978) identifies the four stages of 'conception of ideas', 'proposal of ideas', 'adoption decision' and 'implementation'. His process is also embedded in the organisational dimension of hierarchy, where the flow of innovative ideas is vertically directed. While Daft distinguishes different process patterns within stages, each stage undertakes its own separate activities. Likewise, Ettlie and Vellenga (1979) apply a six-stage sequential model that includes 'awareness', 'interest', 'evaluation' 'trial', 'adoption' and 'implementation' when measuring the influence of macro and micro factors on the time period of decisions with regard to innovation adoption.

The work of Damanpour (1988) presents two stages, 'initiation' and 'implementation'. The initiation stage refers to activities that prompt an organisation to adopt innovation, and are related to the recognition of needs, the gathering of information and the evaluation and resources. The implementation stage refers to the activities related to the modification of innovation and to ensuring its continued use within an organisation. The work of Damanpour and Wischnevsky (2006), which draws attention to the distinction between innovation adoption and generation builds on this two-stage process to provides a six-stage process, which involves a: 'recognition of need', 'search/awareness', 'evaluation', 'selection', 'adaptation', and 'implementation and routinisation'. The empirical work of Damanpour and Schneider (2006) on innovation adoption also emphasises the stages of initiation (pre-adoption), adoption (decision) and implementation (post-adoption), which they see as encompassing the wide range of phases generally identified in studies.

Theoretically, the process of innovation generation has been acknowledged as a more complex collection and connection of different activities, respectively referred to as the 'unitary sequence model' and 'multiple sequence model' (Gopalakrishnan and Damanpour, 1997; Damanpour and Schneider, 2006;). For instance, Damanpour and Wischnevsky (2006), who draw attention to the difference between innovation

adoption and generation, view the sequential process of innovation generation as the recognition of opportunity, research, design, commercial development, and marketing and distribution. In their review of the innovation literature, Crossan and Apaydin (2010) also provide a clear outline of the different sequences of the innovation process, which is based on the work of Gopalakrishnan and Damanpour (1997). They define this as: idea generation, project definition, problem solving, design, development, marketing communication) and innovation adoption as initiation (awareness, attitude, evaluation) and implementation (trial implementation and sustained implementation).

Seminal works that have investigated the process of innovation generation have highlighted a linear process. For instance the process presented by Utterback (1971) with regard to technological innovation includes the sequential stages of 'idea generation' (need recognition, design concept/technical proposal), 'problem solving' (goals and priorities, original technical solution or invention) and 'implementation and diffusion' (manufacturing, prototyping, introduction to market). Nonetheless, as well as the internal environment, Utterback draws attention to the role of the external environment of organisations, (the task and general environment), in the innovation process. These external environments are identified respectively as 'sources and availability of technical knowledge', and 'economic needs for new products and processes'.

Similarly, Robertson (1974) presents a linear process that encompasses the three stages of 'synthesis of need and know how', 'development' (R&D, design, production, marketing), and 'new product'. Robertson mentions the need to illustrate a process that is adapted to innovation in different industries and recognises the challenges of illustrating a linear process brings. Consequently, in his process model, he acknowledges the role of socio economics, and scientific and technical knowledge from the wider general environment. However, scholars have emphasised that a linear innovation process is not characteristic of service innovation (Drejer, 2004; Sundbo, 2010; Ettlie and Rosenthal, 2011).

However, Van de Ven (1999, 2008) brings a different interpretation of the innovation

process. As part of the Minnesota Innovation Research Program (MIRP), Van de Ven (1999, 2008) presents a model based on patterns of innovation based on a grounded analysis of fourteen empirical studies undertaken in the context of a large multinational manufacturing (3M), US health organisations and software development organisations. Building on the model developed by Schroeder et al. (2000) the model includes twelve components, which form three main chronological stages:

- 1. Initiation: A stage in which ideas evolve, and resources are planned.
- Development: A stage where activities to concretise the new idea are undertaken. The innovation also undergoes some adjustment. This stage entails numerous relationships within the organisation, and with investors and the industry. Most often this stage sees the emergence of unplanned events.
- Implementation: At this stage the innovation is adopted as an ongoing outcome across the organisation and its success or failure is determined

In contrast to the linear view, Van de Ven et al. (2008) see the process of innovation as complex and dynamic where internal and external events render it unpredictable. However, they accept that the majority of the investigated studies do not refer to single innovations but rather a wider variety of innovative products, which consequently enhance the complexity of the process. Nevertheless, they underline the need for organisational management to be adaptive for they claim that abiding by the twelve components of the process does not guarantee an effective innovation. In contrast to Damanpour (1991), who supports a strong management control, Van de Ven et al. (2008) believe that an attitude that releases control of the process enables an innovation to be successful.

The model, illustrated in Figure 2-1, represents a departure from the traditional perception of innovation as a linear and sequential process. Van de Ven et al. (2008) find that the process of innovation does not occur in arranged linear sequences but as repetitive cycles where each stage includes behaviours that are divergent (exploitation) and convergent (integration) and are found within different levels of the organisation.



Figure 2-1: Key components of the innovation process (Source: Van de Ven et al., 2008, p.25).

However, despite considering service as an outcome of innovation the above frameworks do not take into account the characteristics of services; in services the process is less likely to be systematic but rely more on human interaction, of which clients can be part (Drejer, 2004; Sundbo, 2010; Ettlie and Rosenthal, 2011). Additional elements that are seen as characteristics of the innovation process in services are highlighted in Table 2.1. While the non-linear model of Van de Ven et al. (2008) is more complex and recognises the dynamic of relationships within the process, this is only acknowledged within development and not within the initiation or implementation stages. This emphasises the R&D perspective of innovation; however, while this implies conscious and radical innovation, it stands in contrast with services where innovation is incremental and does not demand a high amount of R&D (Brouwer, 1997, cited in De Jong and Vermeulen, 2003, p. 845; Toivonen, 2010).

Toivonen (2010)	Service innovation can be systematic. However, innovation processes derived from products/manufacturing are too linear.	
	Stage at which innovation starts might differ according to the innovation.	
	The end of one innovation might be the beginning of another.	
	Tasks can be developed simultaneously by different people/teams.	
	Innovation can happen during and after the delivery of services (adjustments).	
Drejer (2004)	Innovation process in services is less likely to be linear.	
	Clients can be part of the innovation process (co-production).	
Sundbo (2010)	Innovation process in services is not as systematic – Difficult to standardise due to reliance on human interaction.	
	Process is changeable and social – many actors are involved	
Evangelista and Sirili (1998)	The fact that services are also processes by nature must be acknowledged.	
Ettlie and Rosenthal (2011)	Services often imply co-production with clients.	
Gallouj and Weinstein (1997)	Service innovation does not automatically start with planning (ad hoc innovation). Innovation can be recognised after services have been provided	
	Clients might play different roles during their involvement in the innovation process.	

Table 2-1 Characteristics of the innovation in services

Studies that have sought to understand service innovation from perspectives other than a traditional R&D approach have not considered the process of innovation (Toivonen, 2010). Moreover, in consultancy services, which account for a large number of service innovation studies (De Jong and Vermeulen, 2003), investigations have commonly focused on the marketing stage of innovation rather than the processes followed prior to the service offering (Heusinkveld and Benders, 2002).

Nevertheless, the literature provides few studies that have focused on the process of innovation in services. Heusinkveld and Benders (2002), who seek to understand the innovation processes in consultancy services, identify a three-stage process of initiation, formation and realisation, which they refers to as a process of new concept development. Their process integrates the awareness of the emergent nature of service innovation and planning procedures when setting the strategy at the initiation stage. This, in some respects, supports the argument of Van de Ven et al (2008) on the emergent and complex nature of innovation. Also integrated in the model is the reference to both informal and formal procedures in the configuration of resources at the formation stage, and in the overall management of the realisation stage, when the idea is concretised and ready for commercialisation. In that particular context, this has led to the definition of two types of organisation: one that is defined as professionally-driven and entrepreneurial, which allows each stage of the process to be organic and emergent, and the other as processed-driven where the development process is fully complete before commercialisation (Heusinkveld and Benders, 2002).

In a broader context of services that comprise different knowledge-intensive organisations, Toivonen (2010) presents findings from a multiple case study project. She understands the stages of innovation generation (emergence of ideas), innovation development (development of ideas) and innovation implementation (implementation of ideas) to be part of any innovation process. Damanpour (1991) earlier provided a similar three-stage process of innovation adoption. However, Toivonen argues that services are characterised by three types of innovation process. The first type is a linear and consecutive stage, defined as 'a project separated from practice'. She argues that the few studies that have researched the process of innovation in services have mostly done so using these types, which involve manufacturing and New Product Development (NPD) related models. She adds that, although some models have been adapted to services through the concept of new service development (NSD), there is insufficient discussion with regard to newer models that take the participation and influence of clients into account.

The second type is defined as 'the model of rapid application' where the stages of the process can be applied simultaneously; meanwhile the third type defined as 'the

practice driven model', acknowledges that innovation occurs after the implementation stage when services are in use. However, Wolfe (1991) and Van de Ven et al. (2008) have previously acknowledged the idea of simultaneous stages in their productrelated models. For instance, Wolfe claims that, when innovation is adapted from external sources stages tend to occur in order but when innovation is internally generated, the process becomes more complex as stages tend to be more confused and overlapping.

Nonetheless, both Heusinkveld and Benders (2002), and Toivonen (2010) make a theoretical contribution to the integrative approach of innovation as they provide insights on the innovation process that takes the characteristics of services into consideration. However, whilst their frameworks emphasise the nature of the process in the context of services they do not consider influencing elements in the context of services, despite the reliance of innovation on such influences from the internal and external organisational environment (Crossan and Apaydin, 2010; Sundbo, 2010; Chesbrough, 2012).

As the terms are often exchangeable in the literature, the recognition of the new service development (NSD) process is relevant to the discussion on innovation processes in services. A large number of studies have explored the concept of innovation through the concept of NSD (Goldstein et al., 2002; Droege et al., 2009; Jimenez-Zarco et al., 2011; Gremyr et al, 2014). For instance, in their review of literature on service innovation, Droege et al. (2009) use both expressions in the conduct of their research. However, some scholars argue for the need to differentiate them. For instance, Bettencourt (2010) sees service innovation as the process that generates new and improved services to meet market demand. She differentiates it from service development, which is perceived as the tasks involved in bringing these preconceived services to the market. Essentially, Bettencourt views customer need as an essential element of innovation, and that this is not included in service development. Nonetheless, this is debatable since customer need has been found to be particular to knowledge-based service organisations, where it is implied that innovation is for the customer, and is thus referred to as innovation through services (Den Hertog, 2000). Therefore, NSD is considered an innovation process and is

included in the discussion.

A large number of studies on service innovation have highlighted only a specific part of the process. For instance, within financial services, Easingwood and Percival (1990) concentrate on the evaluation stage of the process in their examination of the beneficial value of new services. Similarly, within the context of Banking, telecommunication, Insurance, Transportation and Media, Kelly and Storey (2000) concentrate on the stage of idea generation in their investigation on the use of systematic methods in organisations to generate and assess ideas for new services.

Studies have also considered the full innovation process. For instance, in the service industries of banking, hospital and insurance, Bowers (1989) illustrates a model adapted from Booz et al. (1982) that include eight stages: develop a business strategy, develop a new service strategy, idea generation, concept development and evaluation, business analysis, service development and evaluation, market testing and commercialisation. The model is based on the findings that service organisations tend to pay attention to the business strategy and analysis rather than the methodical procedures of ideas generation, service development and testing/marketing testing. He stresses that it is therefore important for organisations to listen and understand the market in which they operate.

Similarly, in a case study in a large UK financial service organisation, Edgett and Jones (1991) provide a clear and exhaustive new service development comprising twenty-four phases that are encompassed in eight overall stages comprising: problem recognition, idea, product concept development, secondary market research analysis, revision of product concept, primary market research and analysis, revision of product concept, primary market research and analysis, revision of product concept, and market assessment. They found that a detailed and well-organised process, financial resources to undertake market research, and a commitment from senior management constitutes some of the elements required to ensure the successful development of new services. In their synthesis of different models from the literature, Avlontis et al., (2001) identify an innovation process that includes: idea generation and screening, business analysis and marketing strategy, technical development, testing and commercialisation/launch. The process

emphasises the internal activities of organisations that are linked to the development of new services.

Similar to Heusinkveld and Benders (2002) and Toivonen (2010) all the above models illustrate the service innovation process nonetheless; nonetheless, whilst they closely consider the internal environments of organisations they do not take into account any influences from the external environment. However, the need to consider additional contexts influential to the process of service innovation has been recognised. For instance, the work of Edvardsson et al (2000) on innovation and new service development, which seeks to draw attention to the integrative perspective, stresses that the evolving world, of which the network economy and the occurrence of technology is part of, needs to be taken into account, so that service innovation can be applied within the context of both service and non-service organisations. Furthermore, they stress the relevance of organisational culture and strategy on service development, which is reflected in their model. Consequently, their model encompasses the stages of service idea generation, service strategy and the culture gate (allocation of resources, shared values about the project), service design (service concept, service system and service process), service policy development and implementation (introduction and integration into current systems). By acknowledging the cultural as well as the strategic elements Edvardsson et al. (2000) allow for the process to be regarded within a broader organisational context, which helps to draw attention to the influential elements on the process of innovation. However, their focus remains internal to the organisation and their recognition of a network economy and technology is not reflected in the model.

Therefore, based on the understanding that they are part of any innovation process (Toivonen, 2010), the study acknowledges that the service innovation process includes three main stages: innovation generation (emergence of ideas), innovation development (development of ideas) and innovation implementation (implementation of ideas). Furthermore, the study considers that the innovation process encompasses influential elements from both the external and the internal environment of organisations (Edgett and Jones, 1991; Edvardsson et al. 2000; Avlonitis et al, 2001). Indeed, the discussion has previously acknowledged (Table 2.2.) that the interaction with the task environment, through clients and other stakeholders, plays an influential

part in the innovation process of both products or services (Evangelista, 2000; Drejer, 2004; Sundbo, 2010; Ettlie and Rosenthal, 2011). For instance, Alam and Perry (2002) draw attention to the input of customers in the service innovation process in large financial organisations, as they identify the activities that customers carry out at each stage of the process. Ommen et al. (2016) also highlight the positive influence of stakeholders on the service innovation process in franchised retailers.

Furthermore, the literature provides insights that are particularly related to digital innovation; for instance, Vom Brocke and Mendling (2018) use 31 cases from different industries to address the topic of digital innovation. However, as their interest lies in digital process innovations with regard to business process management (BPM), their focus is on digital innovation outcomes instead of the digital innovation process. They see digital technology as a core element of BPM, alongside organisational culture and strategy (amongst others) that enhances the efficiency of organisations. Similarly, Van Looy et al. (2017) focus on process management when seeking to establish a link between digital innovation and the process management aimed at enhancing organisations.

In contrast, Passiante et al. (2003), who seek to highlight the potential of digital innovation based on digital technologies and IT networks, refer to the innovation process in virtual industrial and regional clusters. However, the innovation process is merely regarded as a learning process, as they consider systems as complex and adaptive (CAS) that are reliant on new knowledge and information. Therefore, the work remains focused on the factors that influence the innovation process, which in this case are knowledge and the specific context of virtual clusters. The work of Carlan et al. (2017), who quantitatively measure the level of successful digital innovation within a maritime supply chain, also considers the innovation process. However, they refer to a process of innovation adoption, as opposed to a process of innovation generation, the latter of which is the focus of this study. Furthermore, whilst Carlan et al. identify elements that shape and hinder digital innovation, such as interactions with the task environment, their implications for the innovation process are not explored.

In comparison, due to its reliance on digital technology, Gandia's (2013) study in the video game and animation industry provides a solid context in which to investigate the digital innovation process. Gandia focuses on the economic, technical, legal and cultural changes within the general environment of small and medium organisations with regard to the innovation process. His innovation process includes the following five stages: idea, R&D, industrialisation, marketing and diffusion. Some importance is given to the collaboration with stakeholders, in the form of partnerships and alliances, as well as the internal activities of mergers and training, which he argues has a significant influence on the process. The use of a case study provides a good understanding of the interactions between all stakeholders. However, the emphasis of the study is less on the innovation process than on establishing a relationship between the general environment of small and medium organisations and their innovation behaviours, which is reflected in the strategy they adopt in the management of their innovation process.

Authors	Innovation process	Characteristics
Innovation adoption		
Daft (1978)	Concept of ideas, Proposal of ideas, Adoption decision, Implementation	Stages are sequential. Acknowledges the role of internal environment (administrators and technical employees) on the innovation process
Ettlie and Vellenga (1979)	Awareness, Interest, Evaluation, Trial, Adoption, Implementation	Stages are sequential
Damanpour (1988)	Initiation (need recognition, information gathering, evaluation and resources), Implementation (modification of innovation, ensuring continued use)	Stages are sequential
Damanpour and Wischnevsky (2006)	Recognition of need, Search/awareness, Evaluation, Selection,	Stages are sequential

	Adaptation, Implementation and routinisation	
Damanpour and Schneider (2006)	Initiation (pre-adoption), Adoption (decision), Implementation (post- adoption)	Stages are sequential
Innovation generation		
Utterback (1971)	Idea generation (need recognition, design concept/technical proposal), Problem solving (goals and priorities, original technical solution or invention), Implementation and diffusion (manufacturing, prototyping, introduction to market)	Acknowledges the influence of technical knowledge and external environment (economic sources and social utilisation) on the process. Also acknowledges the contribution of the innovation process to external technical knowledge and environment Stages are overlapping
Robertson (1974)	Synthesis of need and know- how, Development (R&D, design, production, marketing), New product	Acknowledges the role of external socio-economic and technical knowledge on the innovation process. Also acknowledges the contribution of the innovation process to external technical knowledge
Bowers (1989)	Develop a business strategy, develop a new service strategy, idea generation, concept development and evaluation, business analysis, service development and evaluation, market testing and commercialisation	Services: Acknowledges the relevant role of business strategy and business analysis
Edgett and Jones (1991)	Problem recognition, idea, product concept development, secondary market research analysis, revise product concept, primary market research and analysis, revise product concept and market	Services: Emphasise on internal research and analysis, financial resources and management support
	assessment.	
-------------------------------------	---	---
Van de Ven et al. (1999)	Initiation (gestation, triggering shocks, plans & budgets), Development (proliferation of activities, setbacks, performance criteria shift, fluid participation of organisational personnel, involvement of top management and investors, relationships with others, infrastructure development), Implementation (adoption, termination)	Acknowledge the emergence and complexity of innovation Acknowledge the role of internal (management) and external environment (competitors, suppliers, industry players)
Edvardsson et al (2000)	Service idea generation, service strategy and culture gate (allocation of resources, shared values about the project), service design (service concept, service system and service process), service policy development and implementation (introduction and integration into current systems).	Services: Acknowledge technology and emphasise on organisational culture and strategy
Heusinkveld and Benders (2002)	Initiation, formation and realisation (construction and dissemination)	Services: Acknowledges the emergent nature of service innovation and need for planning procedures in the process
Damanpour and Wischnevsky (2006)	Recognition of opportunity, R&D, Testing, Production, Marketing and distribution	Services: Emphasise on internal activities
Toivonen (2010)	Innovation generation, Innovation development, Innovation implementation	Services: Three different process: R&D sequential, Simultaneous functioning of stages, recognition of innovation after implementation

Table 2-2 Characteristics of the innovation process: Innovation adoption and innovation generation

The following section discusses inter-organisational relationships through the concept of social capital.

# 2.3 Inter-organisational relationships

#### 2.3.1 The concept of social capital

Increasingly, organisational studies apply the concept of social capital to better understand social relationships and organisations (Tsai and Ghoshal, 1998; Burt, 2000; Borgatti and Foster, 2003; Jiang et al., 2010). Whilst some scholars see social capital as "just' a powerful renaming and collecting together of a large swath of network research" (Borgatti and Foster, 2003, p.993), for others the concept contributes to the development of a potentially unifying network theory (Kilduff and Tsai, 2012). While this study did not aim to contribute to the development of a single network theory, it recognised that the concept of social capital provides an underlying support that helps to emphasise the notion of organisational-networked relationships through the constructs and resources that they generate. The focus of the study is on social capital external to organisations as opposed to internal, which is social capital developed and generated by relationships that are outside organisations (Partanen et al, 2008). The multiple aspects of social capital and social networks, of which the latter is the main source of social capital (Adler and Kwon, 2002) is highlighted in the literature, and reflects the complexity of social relationships (Granovetter, 1973). In fact, while social capital and social network theories are distinctive they also converge since social interactions are at the centre of networks. In essence, social networks define social capital and social capital concretises social networks (Burt, 2000; Glanville and Bienenstock, 2009). Consequently both have to be reviewed simultaneously. This draws attention to the complexity that characterises both innovation and interrelationships, respectively and simultaneously.

#### 2.3.1.1 Influential theories

The notion of social capital is not recent and has been classically theorised by theorists such as Durkheim and Marx (Portes, 1998) among others. However, its contemporary re-emergence in studies across multiple disciplines (Burt, 2000) can be traced primarily to the ideologies of Bourdieu (1986), Coleman (1988), Burt (1992), and Putnam (1995). Adler and Kwon (2002) provide a valuable distinction to better understand the fundamentals of social capital by conceptually acknowledging it

as social relations; this includes the exchange of gifts and favours, which thus differentiates it from market relations, where products and services are traded, and hierarchical relations are where materials and spiritual security are exchanged for obedience to authority.

By defining the concept as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition", Portes (1998, p. 248) acknowledges Bourdieu as the first contemporary scholar to analyse social capital. In essence, Bourdieu argues that the networks of social interaction enhance benefits and that purposefully and strategically constructing them create resources. Although the benefits and derived processes are not necessarily economic, he claims that all forms of capitals eventually result in economic capital, therefore implying an economic rationale that social capital provides economic resource. One of Bourdieu's central references is to a 'social space', where inherent social inequalities will affect the predisposition of social actors to access these resources. Consequently, this provides an inequality of structure.

Similar to Bourdieu (1986), Coleman (1988) acknowledges that social capital can purposefully create collective resources and that the structure of relationships enables social action. However, Coleman (1988) who adopts Granovetter's (1985) theory of 'embeddness', sees social capital located in the bonding system that is embedded in the structure of relationships between actors, and thus allows for the provision of resources. Moreover, he believes that the characteristics of social capital contribute to public good and that each contribution brings benefits to a cohesive whole. Coleman provides a relevant theoretical contribution by illustrating social capital with three main elements:

- Obligations and Expectations: largely reliant on the trust to which the obligation will be reciprocated and on the extent of the obligation.
- Information Channels: the possibilities of social relations to provide information
- Norms and Effective Sanctions: that inhibit damaging actions and reward beneficial ones

75

However, Coleman's emphasis on the need for internal and closed relationships to enable trust and consequently create social capital has been contested. For instance, in rejecting Coleman's argument, Adler and Kwon (2002) highlight Granovetter's (1973) notion of 'weak ties' and Burt's (1992) concept of 'structural holes'. Burt (1992) claims that a sparse network structure is conducive to brokerage opportunities, which means that the less dense the network, the more opportunities for members to control information and other resources. This is particularly noticeable in entrepreneurship, where entrepreneurs often act as the brokers of information flows and take control of projects that emerge from such flow. Whereas, Coleman's focus was on collective resources, Burt's focus is on individual benefits.

Building on the work of Colman (1988), Putnam (1995) contributes to social capital theory by highlighting three main components: moral obligations and norms, social values (trust) and social networks (voluntary associations). In contrast to Bourdieu, Putnam (1995) sees social capital as a generator of collective benefits, and refers to it in terms of trust, norms, and networks. However, one key criticism of Putnam's theory is that it is considered a 'static formulation' (Morrow, 1999, p.16), in that it does not acknowledge the notion of time in the building of social capital.

Brunie (2009) provides a useful framework that illustrates the different perspectives of social capital, which reflects the complexity and different purposes of social interactions. The framework highlights three different approaches: relational, collective and generalised social capital. These are illustrated in Table 2.3.

	Relational approach	Collective	Generalised
		approach	approach
Level of manifestation	Networks of individuals, groups and organisations	Small, homogenous and exclusive groups	Individual characteristics
Aspect of social life	Relationships actors develop and maintain with other actors	Quality of the relationships among actors within a group	Individual attitudes and predispositions towards others and sometimes institutions
Dimensions emphasised	Resources embedded in personal networks. Social relationships that provide access to	Density of interactions	Societal norms

Utility	resources Activities primarily benefit actors (individual or corporate)	Group-specific activity that cannot be pursued individually. Also facilitate individual	Social good that binds society together and encourages civic behaviours	
		benefits		
Table 2-3 Three different perspectives of social capital (Adapted from Brunie, 2009, p.253)				

2.3.1.2 Definition and relevance of social capital

The above review emphasises a clear distinction between the conceptual perspectives of social capital and the consensus on the beneficial and resourceful aspects generated from the social structure of relationships. However, the concept has been extensively defined and varied, which has led to a lack of unified definition and a perception of inconsistency (Gabbay and Leenders, 2001; Brunie, 2009). Adler and Kwon (2002) state that an overall definition has not yet been adopted. Fukuyama (2001) argues that the large number of definitions has not explained what social capital is but rather how it is displayed.

The diverse definitions are reflected in the literature. From the perspective of a generalised approach to social capital, Fukuyama (2001, p. 7) defines it as "an instantiated informal norm that promotes co-operation between two or more individuals". Fukuyama associates norms with the notion of reciprocity, which he sees contained within a spectrum that extends from simple friendship to more complex and multifaceted friendship attitudes dependent on cultural, religious and historical elements. From a relational approach that emphasises the resources of social relationships, Lin (1999, 2001) refers to social capital as resources embedded in the network or associations of an individual. With a similar approach, Burt (1992, 1997) emphasises the structure of relationships, although he also acknowledges the content element. He refers to social capital in terms of brokerage opportunities where structural holes in the network of relationships provide opportunities to access different resources. From a collective perspective Bowles and Gintis (2002, p. 419) define social capital as, "trust, concern for one's associates, a willingness to live by the norms of one's community and to punish those who do not".

The works of Nahapiet and Ghoshal (1998), and Adler and Kwon (2002) on social

capital offer additional definitions. Adler and Kwon (2002, p. 23) refer to social capital as "the goodwill available to individuals or groups. Its source lies in the structure and content of the actor's social relations. Its effects flow from the information, influence, and solidarity it makes available to the actors" (p. 23). Similarly, Nahapiet and Ghoshal (1998, p. 243) consider social capital as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit. Social capital thus comprises both the network and the assets that may be mobilized through that network". Their definition is similar to Bourdieu's (1986) views, which highlight both the structure and benefits of social capital as well as its private and public resources.

Based on a relational perspective, the definitions of Nahapiet and Ghoshal (1998), further imply the possibilities that social capital results from the internal forms of social interactions, referred to as 'bonding,' and from external forms of social interactions, referred as 'bridging'. This is in contrast, for instance, with Coleman (1988) and Putnam's (1995) and Fukuyama's (2001) definitions, which only consider the internal ties of the social structure. Based on that, the focus of the study was on inter-organisational relationships, and thus the definition of Nahapiet and Ghoshal (1998) was seen as appropriate and adopted.

Social capital has been highlighted in a wide range of business and organisational contexts. For instance, within Israeli high-tech organisations, Honig et al. (2006) investigate the effect of social capital on resource acquisitions and financial performance. Their exploration of ties between these organisations and the Israeli military and defence system (MDS) underlines the potential impact of relationships on performance at the individual and organisational level, highlighting the particularly helpful prospect that these provide for start-up organisations. In fact, their findings show that organisations developing products aimed at the defence industry were more likely to receive investment capital; meanwhile, supplying to this particular industry generated higher sales. These levels of investment and sales were also closely linked to whether entrepreneurs had worked in military R&D, or served in an elite military unit. Although the study was undertaken at a specific point in time, a fact that Honig et al. acknowledge as they refer to a lack of longitudinal data and need for

further research to evaluate ties over time, the study draws particular attention to the importance of present as well as past relationships in the potential for generating social capital.

Research has also shown the effect of social capital within supply chain management. In this context, Lawson et al.'s (2008) study focuses on the effects of the relational and structural elements of social capital on buyer performance. They find that closer connections to suppliers create higher sources of relational capital from strategic relationships; these are translated for instance, as possibilities for adding further activities to the buying process, such as faster orders and other IT-related systems. Here, the importance of communication exchange is emphasised, particularly with reference to technical communication, where quality, level and type of communication is found to enhance buyer performance. The literature provides further reference to social capital in this particular setting (Autry and Griffis, 2008; Carey et al., 2011; Villena et al., 2011).

In the wider context of civil society Sommerfeld (2013) find that Public Relations (PR) organisations create social capital that benefits Peruvian civil society by developing organisational relationships, which are originally established for resource exchange. However, the broad perspective of Sommerfeld's study means that other overlooked factors such as economics, politics and culture are also likely to be influential. Nonetheless, his findings draw attention to the relevance of the quality of relationships, in terms of cooperation and information exchange in developing social capital and key positions that organisations should occupy in social networks to enhance this capital. In the context of the study, where larger international donor organisations in media development are pulling out the country, the notion of benefits generated by positive relationships through the long-term maintenance of social networks is highly significant, as they become key contributors to a better society. The positive role of organisations in generating social capital in civil society is further highlighted by Fukuyama (2001) who sees co-operation as key to the process. He argues that a governments' high level of provision can lead to dependency and reduce capacity to collaborate.

Whilst the influence of social capital has been highlighted in different contexts, innovation studies have also sought to provide insight on organisational innovation from the perspective of social capital, and this is of particular interest to this study. Some studies have stressed the limited influence of social capital on innovation. For instance, Pérez-Luño et al. (2011) find that radical innovation is not fundamentally influenced by social capital; instead, this only occurs when combined with knowledge, since the transfer of knowledge requires actors to communicate, which is facilitated by closer relationships. However, the majority of studies have underlined its positive influence. This is the case in the study by Tsai and Ghoshal (1998) who, in the context of a large multinational electronics organisation, acknowledge that innovation outcomes, in this case product innovation, are dependent on the extent of social capital resource exchanged within the organisation. Based on their finding, they imply that the investment of organisations in developing social capital leads, in due course, to organisational value.

Molina-Morales and Martínez-Fernández (2010), who investigate factors that are involved in organisational innovation, also found that that the outcomes of process and product innovation are influenced by social interactions, trust and shared vision, which are all components of social capital. Rhys (2010) finds that innovation in organisations is enhanced through collaboration and goodwill for it leads to the minimisation of procedures, which improves the build up of knowledge. Furthermore, Subramaniam and Youndt (2005) find that the mode of radical and incremental innovation is positively influenced by social capital. However, whilst their measurements of innovation and social capital draw attention to its importance as an organisational resource and to the social relationships that generate it, they do not provide a deeper understanding of the reasons for such influence. The above studies draw attention to the extensive investigation of social capital with regard to innovation outcomes, as opposed to the innovation process.

## 2.3.1.3 Multi-dimensions of social capital

Despite the extensive number of organisational studies on social capital, a lack of agreement remains about what social capital encompasses (Adler and Kwon 2002). Nonetheless, scholars are increasingly recognising the need to provide a more

holistic picture of social capital by reflecting its multiple dimensions (Bolino et al., 2002; Hoang and Antoncic, 2003) as well as its different levels (individual, collective, organisational) (Leana and Pil, 2006). A multi-dimensional approach to social capital is also understood to contribute to a shift from the structuralist approach, which is traditionally adopted in research and emphasises the configuration of social networks and a static conceptualisation of social relationships (Kilduff and Tsai, 2012). This study sought to apply a multidimensional view of social capital to further contribute to this shift.

From a relational conceptual perspective of social capital, Nahapiet and Ghoshal (1998) who question the traditional one-dimensional analytical approach of social capital have developed a multidimensional framework that considers the structural, relational and cognitive dimensions. Subsequent studies have validated the case for multidimensional social capital with some studies providing different interpretations of the dimensions. For instance, in the context of a regional strategic network, Eklinder-Frick et al. (2014) see social capital as having socio-economic, structural and actororiented dimensions. Koka and Prescott (2002) consider social capital as information benefits that organisations can access through their strategic alliances; they refer to the dimensions of information value, information diversity and information richness, which have different impacts on the organisational performance depending on the context. They argue that Nahapiet and Ghoshal (1998) do not acknowledge the information benefits that each structural and relational dimension provides and that these are assumed regardless of the dimensions. While their argument is valid, it is nonetheless weak since the focus of Nahapiet and Ghoshal's study is on the particularity of essential knowledge mechanisms and processes in creating intellectual capital, and not on the concept of information; it is understood that these are two different intangible goods (Miozzo and Miles, 2003).

The seminal work of Nahapiet and Ghoshal (1998) is extensively recognised in the literature for depicting a holistic picture of social relationships by highlighting the multiple interactions between each dimension. Furthermore, their framework contributes to the recognition that more than structure affects social capital. On this basis, the study considered the above dimensions as identifying the characteristics of social capital in small digital marketing agencies. However, for the purpose of the

study and due to the primary focus of the cognitive dimension on the investigation of organisational strategies, only the structural and relational dimensions were explored and reviewed in this chapter.

#### 2.3.1.3.1 The structural dimension of social capital

The structural dimensions of social capital refer to the "overall pattern of connections" between actors" (Nahapiet and Ghoshal, 1998, p. 244) within a social network, which Burt (1992, quoted in Nahapiet and Ghoshal, 1998, p.244) explains as the "who you reach and how you reach them". Research has shown that the structure of relationships has an effect on an organisation's profitability (Gulati et al., 2000) and innovation by influencing innovation behaviour and the potential for knowledge creation through information diversity and transmission (Gulati et al., 2002; Schilling and Phelps, 2007). Moreover, Comet (2009) finds that within the context of small organisations, different structures of relationships benefit different types of organisations according to their level of independence, specialisation and diversification. In exploring the structural characteristics of social relationships, most studies have considered the concepts of 'strength of ties' and 'structural holes' or configuration (Levin and Cross, 2004; Payne et al., 2011) with the acknowledgment that both overlap. The concept of network configuration, which includes the elements of network density and cohesion, is also used as an approach to measure social capital; however its viability remains to be evidenced (Lin, 1999). On this basis, and the focus of the study on inter-organisational relationships the concept of network ties is considered and discussed.

#### 2.3.1.3.1.1 Network ties

Ties constitute a main characteristic of social capital and are known to provide the benefits of resource access (Nahapiet and Ghoshal, 1998; Adler and Kwon, 2002). One fundamental theoretical principle of ties is that they can be weak, strong or inexistent (Granovetter, 1973). Granovetter (1973, p. 1361) first introduced the theory of tie strength, which he defines as a 'combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie". Overall, Granovetter considers that the absence of ties or very

weak ties, as inconsequential, while weak ties are most influential and strong ties much less significant.

Granovetter (1973) draws particular attention to the relevance of weak ties, which has led to the extensive investigation of social networks with the application of the 'strength of weak ties' theory and the argument that distant relationships within a group provide more information and opportunities for connection. These distant relationships are viewed as further conducive to innovation, as opposed to stronger ties, which often result from the interaction between similar actors and where information is more likely to be irrelevant. A large number of studies have highlighted the theory of weak ties. For instance, Hansen (1999), who investigates network ties in a large organisation with reference to product innovation, finds that weak ties are influential when searching for information; this is because they provide newer and more relevant types of information on the basis that connections are more easily adaptive, and less conditioned or constrained than in a closer structure. Moreover, in their study of three large organisations, Levin and Cross (2004) show that weak ties contribute more than strong ties to the efficiency and effectiveness of projects by considering the information received as more useful. Furthermore, weak ties are found to have a fostering role in innovation as they provide added opportunities to access hard to reach knowledge (Rogers, 1995). In the context of networks and SMEs, Julien et al. (2004) also find that weaker ties are more conducive to technological innovation.

The concept of weak ties has been further reinforced by the theory of Burt (1992) on structural holes, which supports the notion that the absence of ties complements the benefits of weak ties since it offers bridging opportunities and creates social capital by leading to more diverse networks. Burt's argument is based on the principle that homogeneous behaviours within groups are not conducive to the generation of new thoughts and ideas, which are more likely to happen across groups.

However, the literature highlights the overemphasis on the benefits of weak ties, with the argument that weak ties are unlikely to sufficiently provide all the benefits and can lead to other relevant factors being overlooked (Gans, 1974). This argument is strengthened by the fact that the study of both Hansen (1999), and Levin and Cross

83

(2004) recognise the need for strong ties to transfer and receive knowledge and that a lack of strong ties disable the flow of expertise. Hansen sees that both ties have their respective uses, and that this depends on the complexity of knowledge. He argues that, while weak ties are more relevant when sharing simple knowledge, stronger ties become more essential when knowledge is complex or tacit. Nevertheless, this is debatable since strong ties can be negative for the creation of knowledge, since high levels of friendship or familiarity between actors can get in the way of gathering useful information (Smith et al., 2005). Levin and Cross (2004) show that strong ties still enable useful knowledge to be received, where trust acts as an intermediary in the exchange process.

In fact, through trust, strong ties "mitigate the moral hazards anticipated at the outset" (Gulati et al., 2000, p. 209). While strong ties are likely to contribute to social relationships being restricted and inward-looking (Capaldo, 2007), Gulati et al. (2000) state that they are strategically beneficial for they are more difficult to imitate, and they help organisations to better appreciate the capabilities and resources of potential partners, thus increasing their confidence in them. Interestingly, in considering the role of strategic networks on organisational strategies, Gulati et al. (2000) take into account the strength of connections as well as the nature of ties, which they categorise as collaborative or opportunistic. Overall, they see that relationships are both competitive and collaborative as network members have both private and common interests (Gulati et al., 1994, cited in Gulati et al., 2000, p. 211).

Consequently, both weak and strong ties have to be considered positive. In effect, Capaldo (2007) finds that, in network alliances combined ties create a 'fertile ground' (p. 605) for developing organisational innovation capabilities. He stresses the relevance of a twofold structure where longer established relationships, in which trust has developed help to make use of the network capital while weaker relationships help to explore the potential for new processes, knowledge areas and markets. Importantly, his findings show the relevance of ties and the structural element, since different strengths of ties have different influences on innovation.

## 2.3.1.3.1.1.1 Measuring the strength of ties

Granovetter (1973) claims that the distinction between strong and weak ties implies the use of measurement, such as frequency of interaction, which he defines as interaction occurring often (at least twice a week), occasionally (more than once a year but less than twice a week), and rarely (once a year). A greater frequency has been found to enhance innovation (Moran, 2005) by building knowledge and supporting the exchange of ideas (Ahuja, 2000). The frequency of ties has been examined with regard to the innovation outcomes of product innovation. Tsai and Ghoshal (1998) highlight the measure of frequency as well as closeness of relationship by measuring internal organisational ties through questions that include the concept of 'time spent together' and 'close relationships'. However, their finding is only applicable to socially related interactions, which are distinguished from business related interactions. They consider social interactions as a structural component of social capital; whereas they see business related interactions as an intermediary of resource exchange between social capital and product innovation. Their findings show that a higher frequency of social interaction enhances the exchange of information, product, personnel and support resources between business units, and consequently promotes product innovation.

Both the frequency and closeness of relationships have been used in other studies (Hansen, 1999; Frankenberger et al., 2013). As ties bring the potential for resources, closeness is more likely to provide those resources in the form of information, experience and support (Moran, 2005). In their study on solution providers and service partners, Frankenberger et al. (2013) refer to frequency as interactions taking place from several times a week to a few times a year, and closeness incorporating very close to very distant relationships. Similar to Gulati et al. (2000), their measurement of ties, along with other network components, help to identify that different relationship structures enhance organisational performance. Furthermore, they show that the high frequency of contacts and closeness is present when more complex solutions and services are required and a higher level of responsibility drives a higher level of interaction. In addition to frequency and closeness, Smith et al. (2005) introduce the notion of time, which is measured within organisations by considering the number of months that relationships between senior managers and knowledge workers have existed. The measuring nature of their study confirms that

85

stronger ties influence the capability for knowledge creation; however, no further insight or understanding of each measuring indicator is provided.

The relevance of indicators in measuring the strength of ties has been discussed in the literature. While defending the relevance of strong ties, particularly in times of change and uncertainty, Cross et al. (2003) argue that the theory of Granovetter (1973) provides a notion of ties that is too ambiguous and that his definition lacks a main affective element. Building on the work of Granovetter, they reframe the idea of strong ties by using the terminology 'Philos', that is closely related to the notion of friendship and encompasses three measurable conditions: interaction, affection and time. Affection is understood in terms of actors that people would turn to for advice and support and the combination of the three conditions is seen as necessary to enable trust. However, the comprehensive study of Marsden and Campbell (1984), which is one of the few to validate measures for the strength of ties, determine the notion of intimacy highlighted by Granovetter using the breadth of subjects discussed and extent of mutual confiding of actors, and the notion of closeness using the level of intensity of relationships. The study considers whether contacts are considered acquaintances, good or very good friends. Therefore, it could be argued that the facet of affection highlighted by Cross et al. (2003) does not provide new elements that are not already encompassed in the notions of intimacy and closeness.

Marsden and Campbell (1984) see the closeness and emotional intensity of relationships as the best indicators of tie strength available in the literature and recommend its use when exploring not only the strength of ties but also the measures of intensity. They claim that closeness is not affected by factors such as whether contacts are related or work within the same environment, as would other indicators. Some scholars have argued that the sociological concept of emotional intensity and intimacy is not applicable to inter-organisational ties. This has led to Rowley et al, (2000, p. 371) defining the strength of ties as the "frequency of interaction between partners and their level of resource commitment to the relationship". The focus of Rowley et al.'s (2000) study on strategic alliances underpins their argument since relationships in this context are likely to be more contractual and require investment and commitment while the need to understand

each other will be less important (Besser and Miller, 2011). However, a sociological approach to measuring ties is also likely to be relevant in inter-organisational relationships since organisations are social constructs (Castells, 2010). Moreover, both structure and the social element of relationships have an influence on organisations, as it is the case with innovation (Borgatti and Foster, 2003).

Based on the above discussion, this study sought to determine the strength of ties of small digital marketing agencies with their task environment using the measure of closeness and frequency of interaction. Whilst the work of Frankenberger et al. (2013) is one of many to consider the strength of ties as a relational component of social relationships (Smith et al., 2005; Autry and Griffis, 2008; Lechner et al., 2010; Phelps et al., 2012; Stam et al., 2014), the study considers the strength of ties as a structural component based on the view that strong ties do not automatically mean trust between actors. In fact, Levin and Cross (2004) stress the importance of regarding ties as structural for they allow the integration of structural (strength) with relational (trust), which they present as 'trusted weak ties'.

# 2.3.1.3.2 Influencing factors on the structure of social relationships

Following the acknowledgement of the influence of contextual and dimensional factors on the structure of social relationships, the literature highlights time and goals as especially relevant.

Time influences the structure of relationships, in that longer interaction time can lead to stronger ties (Capaldo, 2007) or time in existing relationships influences the strength of ties. It is one essential element on which trust can develop for it provides the "experience to allow each person to predict how the other will use any shared information. Without history there is no experience to know how the other will use that information" (Cross et al., 2003, p.85). However, the limitations associated with time are recognised in the literature with reference to small firms. For instance, in small entrepreneurial firms there are contrasting positions that the benefits of trust and access to resources provided by the structure of relationships increase over time and that relationships are only temporary, deteriorate over time and are likely to be copied by competitors (Stam et al., 2014). Despite these two positions, relationships

have nonetheless been acknowledged to evolve over time and a particular relationship structure that provides social capital in the present may not necessarily do so in the future (Walter et al., 2007). However, Salancik (1995) claims that this evolution is not often reflected, as studies do not tend to consider changes over time. Furthermore, even when evolution is considered, studies only provide a snapshot for they do not acknowledge the dynamics of social networks (Gabbay and Leenders, 2001), which, despite remaining stable over a long period of time, are still subject to internal and external dynamic forces (Gulati et al., 2000).

#### 2.3.1.3.3 The relational dimension of social capital

'Relational embeddedness' refers to the nature of relationships that people have developed over time (Granovetter, 1992), and relations they have in terms of respect and friendship that can influence their behaviour (Nahapiet and Ghoshal, 1998). Studies have often viewed the relational component as secondary to the structural component, which is viewed as a major contributor to social capital and an enabler of other elements (Leana and Pil, 2006). However, the relational element has been found to potentially contribute more to organisational performance and innovation than structure (Moran, 2005). For instance, Moran shows that, while the structural element has more influence on explaining sequential procedures, the relational element is more efficient in explaining innovation-related procedures. Furthermore, in their research on social capital and organisational performance in education, Leana and Pil (2006) find that the quality of the relationship in teaching plays an intermediary role between social capital and student performance. Therefore, both dimensions should be taken into account in studies. This view strengthens the argument of Olkkonen et al., (2000) and Hoang and Antoncic (2003) who also emphasise the relevance of both dimensional components. Shaw (1997, cited in O'Donnell, 2004, p.207), however, argues that it remains for the literature to clearly establish the difference between both relational and structural components with regard to small organisations, which O'Donnell (2004) interprets as the need for more investigation to be carried out with regard to the relational dimension in this context.

Nahapiet and Ghoshal build on the Granovetter's (1992) work on relational

embeddedness to develop a relational dimension to their multidimensional social capital framework. Moreover, they draw attention to personal and emotional behaviours in contrast to relationship bonds. The dimension encompasses the notions of trust, norms, obligations and expectations, and identification. The notion of trust is defined as a belief in a relationship and the positive outcomes generated from that relationship. Furthermore, based on extended evidence from empirical studies, it is understood to enable engagement and cooperation. The notion of norms underlines the work of Coleman (1988) on consensus in social systems, and highlights cooperation within relationships as a behavioural norm, which they view as fundamental to the creation of knowledge. The notion of obligations and expectations implies a commitment to carry out future activities when required. This notion particularly reflects the idea of collaborative behaviour in joint work and projects that goes beyond contractual obligations. Finally, the norm of identification relates to the assimilation behaviour of individuals to the values held by the collective, which they argue also enhances cooperation.

In empirical studies, numerous ways and configurations have been used to explain the relational dimension. The case studies of Carson et al. (2004), that investigate an established network of relationships in the distribution industry, explores both the structural component of relationships through the configuration of relationships, and the relational component through the strength of the relationships. This is measured using notions of trust, commitment and co-operation. Moreover, their use of trust is based on the argument that the literature has extensively recognised the notion of trust as relevant in network relationships. Trust is measured through the nature of information shared between members of the network and their confidence in the guidance they receive. Similarly, the use of commitment is based on the argument of a broad recognition in the literature and its particular influence on the strength of marketing network relationships. Commitment is defined as the time and effort that members contribute to relationships. The notion of co-operation entails the level of organisation between members of the network with regard to marketing activities related to their market and the level of reciprocity and compatibility amongst their marketing objectives.

In contrast to Carson et al (2004), Leana and Pil (2006) use the notion of information sharing to measure the structural dimension of social capital. In the context of education their work considers both the external and internal social capital in several schools. However, they only apply the relational dimension to internal social capital. Nonetheless, trust is used as the measuring tool and relates to the level of trust among employees; this is defined through several measuring criteria. Whilst the findings of Carson et al. (2004) illustrate the relational dimension of social capital where the role of trust, cooperation and commitment are highlighted, Leana and Pil's (2006) findings on the measurement of trust are not explicit for it is encompassed in the correlation between internal and social capital and their effect on performance. In their multiple case studies, Partanen et al. (2008), who seek to focus on the evolution of social capital over time in small science and technology organisations, explore the role of each dimension of social capital in organisational development. The research identifies trust, and values and norms as relevant to their growth. Furthermore, values and norms are found to enhance trust since the specialised expertise of the organisations contributes to the developing trusted relationships, which are reflected by technological collaboration.

In contrast, in their investigation on the correlation between social capital and its influence on the market share of multinational organisations, Castro and Roldán (2013) consider the relational element in terms of multiple partners and alliance activity. They investigate the dimensions respectively through the number of alliance projects carried out by organisations with the same partner and their management of alliance projects over time. Whilst this consideration of the relational element differs from the studies of Carson et al. (2004), Leana and Pil (2006) and Partanen et al. (2008), trust is nonetheless similarly acknowledged since they use measuring elements to determine the trust between partners and the quality of relationships. Therefore, whilst the literature evidences that different components are used to investigate the relational dimension of social capital, trust is consistently encompassed in empirical studies as a measuring, or underlying component, of relevance to the quality of social relationships.

Conversely, few studies have debated and disagreed with the use of trust in the

investigation and measurement of social capital. For instance, Lindstrom (2014) argues against the claim of Carpiano and Fitterer (2014) that trust cannot be used with social capital. They stress that, whereas the concept provides useful psychological insight it does provide information on social relationships. According to Lindstrom, this raises an interesting question that can be further investigated, however, the extensive influence of the work of Coleman (1988) and Putnam (1995) who consider trust as a key element of the relational dimension of social capital cannot be overlooked. Furthermore, trust is closely related to the concept of ties from Granovetter (1973) since frequent personal interactions between parties are likely to enhance the trust in ties (Besser and Miller, 2011). On this basis, the study considered trust when investigating the relational dimension of external social capital in the small digital marketing agencies. The notion and forms of of trust are further discussed below.

#### 2.3.1.3.3.1 Forms of trust

In their study that measures trust in intra-organisational relationships Dietz and Den Hartog (2006) highlight three forms of trust:

- Trust as a belief: Trust is subjective and refers to the confidence that an actor has in another and their relationship, and in the implication of a positive outcome with beneficial results
- Trust as a decision: The actor decides to trust the other actor. This requires having a trustworthy behaviour and to act on it
- Trust as an action: Trust is shown by the actor through a behaviour of risk taking, which can be classified as reliant (i.e.: surrendering control and decisions) and disclosure (i.e. sharing sensitive information)

The forms derive from the literature that Dietz and Den Hertog (2006) undertake on the conceptualisation and definition of trust. They find that most of the measures of trust used in studies focus on the first form that relates to the belief of the trustor, which takes into account issues of integrity, benevolence, ability and integrity. Ability is described as competence in performing obligations, benevolence relates to the kindness and concern for welfare, whilst integrity is described as following satisfactory principles, and predictability relates to the consistency and regularity of behaviour. The focus on trust belief is evidenced in the work of Levin and Cross (2004), who consider the issue of benevolence and competence-based trust in their measurement of the relationship between trust and knowledge exchange in three large multinationals.

The work of Levin and Cross is particularly relevant for it also highlights the dynamic of relationships as it acknowledges the relationships between the structural and the relational dimensions of social relationships. The relationship is shown as trust in strong ties is found to be a mediator between strong ties and receiving valuable knowledge. This finding strengthened the justification to consider the relational dimension of social capital in addition to the structural dimension. Studies, such as those by Molina-Morales and Martínez-Fernández (2010), also evidence the empirical focus on trust belief in the investigation of trust since the notion of confidence is implied in their definition of trust as a level of fairness and honesty that organisations are considered to demonstrate during the exchange of resources. Seppänen et al. (2007) further underlined this focus in their review of empirical studies that measure inter-organisational trust.

However, some studies have drawn attention to the form of trust as a decision, which Silversides (2001) refers to as an enforced arrangement. Silversides suggests that mutual interdependence between organisations means operating through enforced arrangements and requirements, and that small service organisations are often required to function by trusting their customers, providers and competitors. This is evidenced in Carson et al. (2004) where competition between small organisations in a distribution channel is found to disable the creation of trust and strong horizontal ties.

#### 2.3.1.3.3.2 Trust in organisations

The positive influence of trust on organisations has been highlighted in studies that investigate it from the perspective of inter-organisational relationships, and do not apply a social capital approach (Möllering, 2002; Dietz and Den Hartog, 2006; Huang and Wilkinson, 2013; Chen et al., 2014; Ashnai et al., 2016). Additionally, the positive

influence of trust has been highlighted in studies that have considered trust a component of the relational dimension of social capital. These have been carried out at the level of society and community (Hughes et al., 2011; Mironova, 2015), and within health studies (Moore et al., 2009; Carpiano and Fitterer, 2014). Studies carried out at the level of organisations include that by Nahapiet and Ghoshal (1998). In their conceptual work they stress the positive influence of trust on organisational improvements. Rhys (2010) considers trust in the relational dimension of social capital with reference to the performance of local governments in the UK. His work measures trust between senior managers and employees as well as between senior managers and politicians. Rhys stresses that fostering the relational element of social capital, among others, helps to enhance organisational performance. Nevertheless, his work is highly specific to the political context of local governments, where relationships often consist of conflicting exchanges and where organisational performance is characterised as multidimensional and complex. Similarly, the works by Moran (2005) and Carey et al. (2011) within pharmaceutical and manufacturing contexts, respectively, identify the positive influence of trust when measuring the relational element of social capital on organisational performance.

Although the above studies consider the influence of trust on organisational performance, the literature offers a more limited number of studies where trust is considered with regard to innovation. Tsai and Ghoshal (1998) provide one study that takes innovation into account. In a large multinational electronics organisation they find that trust in the relational dimension of social capital helps to boost product innovation by enhancing the exchange of resources between business units. Nonetheless, the focus remains on the outcome of product innovation as opposed to the innovation process. Overall, the literature has highlighted that trust, as the relational dimension of social capital, which represents the quality of relationships, has, in general, been quantitatively measured. These measurements have objectively established the positive influence of the quality of relationships on organisations. However, the limited number of studies that have used a qualitative approach has motivated this study to further explore trust within the relational dimension of social capital, from a subjective and qualitative perspective. Following the discussion on social capital the next section will discuss the concept of innovation

process and social capital.

#### 2.3.2 Social capital and the innovation process

One key element from the organisational task environment that influences the innovation process is the clients. In services, Gallouj and Weinstein (1997) highlight several terms such as interaction, co-production or interface, when summarising the involvement of clients in the provision of new services. Seminal theoretical works, such as the work that by Gadrey and Gallouj (1998) and Gallouj and Weinstein (1997), have accentuated the participation of clients as a key characteristic of service innovation.

Moreover, some studies have investigated the service innovation process taking clients into consideration. For instance, the work of Alam and Perry (2002) in large financial organisations acknowledges the role of clients at each stage of the innovation process. Smedlund (2008a), who sees clients as a core element of service innovation, uses the strength of client relationships in relation to the degree of innovation (incremental/radical) during the development process of new services to develop a classification of four types of professional service. Smedlund finds that a high potential service, which refers to a collaborative radical innovation where clients assume part of the risks, is undertaken when the relationship between the organisation and client is strong. This contrasts with the operational service, where clients are aware of the expected results, which are innovated when the relationship is weaker.

The work of Jimenez-Zarco et al. (2011) in Spanish service organisations takes clients into account when measuring the relevance of client relationships and market orientation on the process of radical innovation. The study sample, which includes service organisations that have undertaken radical innovation within a particular timeframe, does not, however, specify the size or type of organisations researched. Nonetheless, they show that integrating clients in the process is linked to a more efficient new service solutions design. Moreover, organisations that adopt a client orientation are found to involve their clients in the process in contrast to those that do not. However, interestingly Jimenez-Zarco et al. find that the number of service organisations that cooperate with clients during the innovation process is limited. This

fact has been highlighted in other studies with the claim that the involvement of clients in innovation is financially demanding and that this is due to the difficulty in assessing the viability of more intangible services (Syson and Perks, 2004). This contrasts with the fact that clients are widely acknowledged as key contributors to service innovations and are even recognised as service innovation capabilities (Mansury and Love, 2008; Viet Ngo and O'Cass, 2013).

Undoubtedly, both Smedlund (2008a) and Jimenez-Zarco et al. (2011) draw attention to the innovation process when stressing the relevance of client relationships to service innovation. For instance, Smedlund implies a three-stage process of idea, development and commercialisation in which he looks at the management of relationships within each stage. Jimenez-Zarco et al. (2011) reflect the innovation process through the concept of ICT, where the level of use in innovation activities is measured, based on the argument that ICT is embedded in the innovation process and directly linked to the cooperative relationships of service organisations. However, the core focus of both studies remain on the relationship with clients with a view to respectively identifying innovation outcomes and expending the cultural concepts of market orientation in organisations. On this basis, a greater understanding of the innovation process and clients relationships is required; this is reinforced by the acknowledgement that the process of service innovation, particularly in knowledgebased organisations, is initiated by the needs and demands of clients (Campagnolo et al., 2010) and that clients often collaborate in the process (De Jong and Vermeulen, 2003).

Additionally, the work of Jimenez-Zarco et al. (2011) inform us that service organisations establish relationships with actors other than with clients in their task environment, who are also influential to the innovation process. This is further recognised by Ommen et al. (2016) who measures the factors that lead to a successful participatory innovation process in franchise organisations. Their findings highlight the positive influence of establishing relationships with stakeholders and their participation in the process, which they categorise as relational benefits, performance improvements, and enhanced innovativeness. However, their concept of stakeholders does not identify the individuals, groups, or organisations that were investigated, nor offer any deeper insight into the condition of the relationships.

95

In one case study, Gerke et al. (2017) also investigate the task environment and the innovation process through the relationship framework of Inter-organisational Citizenship Behaviour (ICB), which refers to and encompasses specific inter-organisational behaviours in cluster organisations. The framework as well as the setting of the investigation, was a sailing-related industry cluster in New Zealand, and provided a limited context of study. However, the studies of Ommen et al. (2016) and Gerke et al. (2017) support and reinforce the acknowledged understanding that the innovation process has an interactive nature (Edquist, 1997) and that it is influenced by the task environment. This draws attention to the social capital approach that is key to understanding organisational innovation through organisational relationships (Partanen et al, 2008). Therefore, the concept of the innovation process and social capital is further discussed below.

Whilst the literature provides a large number of studies on innovation and social capital with a focus on modes and outcomes of innovation, the number of studies investigating the innovation process and social capital is limited. The work of Syson and Perks (2004) in professional services stands out for its attention to the innovation process within social networks. Their findings show that a large financial service organisation enhances their innovation process through its social relationships with the task environment by coordinating approaches with competitors and better communicating with suppliers, among others. However, their single case study is within the context of financial services and, whereas the study provides a clear illustration of the relationships of the organisation, the dynamics and constructs of the relationships are not investigated.

Syson and Perks (2004) provide additional evidence that the investigation of innovation and social capital has most often focused on larger organisations for these are more likely to have systematised innovation processes (Subramaniam and Youndt, 2005). Notwithstanding, the capital generated from social relationships is essential to small innovative organisations, where their approach to innovation tends to be more incremental (De Jong et al., 2003, cited in Casani et al., 2013, p.576). These relationships provide better access to tangible and intangible resources, and

enhance collaborative action and communication (Hansen, 1999; Adler and Kwon, 2002; De Propis, 2002; Capaldo, 2007; Comet, 2009) through the exchange of ideas and information with clients and other third parties (O'Mahoney, 2011). This argument provides additional motivation to further explore the concept of innovation process with reference to social capital in the context of small service organisations.

The following section discusses the concept of knowledge capital.

# 2.4 Knowledge Capital

The increasing relevance of knowledge and the role of knowledge-based organisations has been discussed in management studies. This relevance is highlighted by Castells (2010), who suggests that the current knowledge-based economy depends on knowledge-based information being generated, processed and applied within the production, consumption and distribution dynamics and through mechanism of business networks. Furthermore, studies have emphasised the relevance of knowledge to the innovation process (Mahr et al., 2013; Kazadi et al., 2016).

However, Phelps et al. (2012) highlight knowledge outcomes (creation, transfer/learning and adoption/retention/implementation) and knowledge properties as two main research dimensions. With regard to knowledge outcomes, studies, such as Smedlund (2008a), emphasise that knowledge creation serves to develop innovation, knowledge transfer to learn best practices, and knowledge implementation to competently produce products. However, Phelps et al. (2012) find that, whilst most studies have focused on knowledge outcomes, less attention has been given to the properties of knowledge with regard to the innovation process; this motivated the study to focus on the latter. The literature often highlights knowledge from the perspective of the internal environment of organisations, which is a component of Intellectual Capital (IC) (Edvinsson, 1997; Cleary, 2009; Oliver 2013). However, knowledge also relates to the external environment of organisations, as both are part of their knowledge base (Kogut and Zander, 1992; Schweisfurth and Herstatt, 2016). The positive contribution of both internal and external knowledge to innovation and the innovation process has been recognised. For instance, Runguist (2012) finds that the combination of both types of knowledge improves the performance of the innovation process and consequently, organisational growth. Therefore, both are considered and discussed below in this study.

#### 2.4.1 Internal and external Knowledge

Stewart (1999) and Cleary (2009) understand Intellectual Capital (IC) as encompassing human capital (HC), structural capital (STC) and relational capital (RC) and include knowledge in the human capital component based on the consideration that it is the individual knowledge that is stored by employees in an organisation. Similarly, Grimaldi et al. (2012) consider knowledge as part of IC, which they describe as the knowledge produced and owned by individuals as part of human capital. However, they stress the need to regard knowledge as both static and fluid where the first relates to the stock of knowledge that is available within organisations and the latter to the flow between these stocks and its resulting outcome. Therefore, their evaluation of knowledge refers respectively to the organisational contribution of defined knowledge resources as well as the value contribution generated by their interaction.

Cleary (2009) does not consider knowledge as flow but claims that a large majority of IC definitions stress the value of intangible in addition to tangible resources, which interestingly could be seen as similar to the perspective of fluid knowledge. Smith (2001) also recognises knowledge as a value and believes that it can only be enhanced when linked to a main purpose related to mission, core values and strategic priorities. Similarly, Davenport and Prusak (1998, cited in Grundstein et al., 2003, p.256) see knowledge as enabling organisations to make better decisions leading to better actions. However, knowledge is also referred to in terms of resource and capability. For instance, Nahapiet and Ghoshal (1998) do not emphasise the value element but define IC as the resource and capability of a particular collective. The capability refers to the knowing capability that enables to take action using the resource of knowledge. This definition is attributable to the attention of their inquiry on the existence of social and collective knowledge. Similarly, Cook and Brown (1999) distinguish between knowledge and knowing capability, which they see as mutually empowering, although they give attention to the element of value with the

claim that the interaction between knowledge and knowing capabilities enables the creation of new knowledge that is particularly valuable in the innovative environment. The consideration of knowledge as a capital by the study is based on the recognition of knowledge, as a resource and value that is conveyed by the resource to organisations, in this case, with reference to the innovation process. Therefore, based on the definition of Nahapiet and Ghoshal (1988), the study referred to knowledge capital as the knowledge resource and knowing capability.

Knowledge and external social capital are intrinsically embedded for knowledge is an embedded intangible resource of social capital (Nahapiet and Ghoshal, 1998; Castro and Roldan, 2013). Furthermore, social relationships are essential in creating, transferring and integrating knowledge, which enhances organisational innovation and performance (Cross and Sproull, 2004; Darroch, 2005, Robert et al., 2008). The relevance of knowledge and external relationships, has, for instance, been acknowledged in the context of cross-national alliances in studies such as those by Eunni et al., (2006) and Le Nguyen and Felicitas (2007).

Furthermore, knowledge is considered an intrinsic feature of service firms and access to knowledge from external sources is one of the most enabling factors of innovation (Hogan et al., 2011; O'Mahoney, 2011). Therefore, the relevance of both knowledge and relationships has increasingly led to studies to pay attention to both concepts jointly (Wirtz et al., 2010). Phelps et al. (2012) claim that the ability and capability of creating individual and collective knowledge is reliant on social relationships and their derived structures for it depends on how they access, transfer and apply knowledge. They stress that organisations can easily transfer codified knowledge and that the transfer of tacit knowledge requires relationships to display higher levels of trust, greater frequencies of contact, and joint problem solving. While their findings are based on a comprehensive review of organisational studies, the review is particularly focused on knowledge networks where social relationships are purposefully created to generate and transfer knowledge, therefore providing likely consequent structural characteristics.

The work of Smedlund (2008b) brings the structural, relational and cognitive

dimensions of social capital and knowledge into perspective with the assumption that different types of knowledge require different social structures or 'knowledge environments' to evolve and create organisational value. They find that, in a centralised structure with norms and trust, and hierarchy, explicit knowledge (i.e.: databases) creates organisational value through production. In contrast, within a decentralised structure with liberal norms and beliefs on innovativeness, potential knowledge (i.e.: new technology) creates value through innovation, and the sharing and transfer of tacit knowledge (individual knowledge) in a distributed structure with norms of reciprocity and incremental trust generates learning benefits, which enhance organisational performance. Both Phelps et al. (2012) and Smedlund's (2008b) work reinforce the connection between knowledge and social relationships, not only through structural components, but also through the relational components of social capital, which enhance organisational performance.

Nonetheless, studies have found a negative link between the structural and relational components of social relationships and knowledge outcomes. For instance, ties that are too strong are likely to reduce the performance of project collaboration, while higher levels of trust are likely to impede access to new knowledge therefore reducing innovation (Phelps et al., 2012). However, a positive link is also stressed in studies, such as that by Smith et al. (2005), who stress that the size of a social network in an organisation and the strength of its ties influence knowledge creation with a consequent positive influence on innovation. Moreover, studies have found that some structures are more efficient in transferring knowledge than others depending on the type and quality of relationships (Walter et al., 2007). While it has been extensively established that knowledge outcomes are positively and negatively influenced by social relationships, there is also a need to focus on the characteristics of that knowledge (Smith et al., 2005) to help understand the different types of knowledge, which is also necessary to further comprehend the connection between innovation and inter-organisational relationships (Levin and Cross, 2004).

Menon and Pfeffer (2003) state that external knowledge tends to be more appreciated by organisations as externally related learning is scarcer and is therefore seen as more particular and exclusive, which enhances the management status of organisations. However, it has also been found that internal knowledge is more valued when combined with further internal resources (DeSarbo et al., 2005). Nonetheless, the importance of external knowledge has been questioned with the argument that the increasing practice of outsourced R&D that relies on external knowledge is unlikely to enhance innovation (Grimpe and Kaiser, 2010). Nevertheless, it is important to consider that the concept of outsourced R&D is particular for it implies full reliance on external knowledge, which is generic and easily imitable (Grimpe and Kaiser, 2010). Therefore, it can be argued that both internal and external knowledge are likely to be valuable to organisations and should be regarded as complementary, which, based on previous principles of knowledge complementarity mentioned by Hecker (2012), provides value since the resulting knowledge is larger than each knowledge.

#### 2.4.2 Tacit and explicit knowledge

In order to better understand knowledge, it is necessary to understand the range of different classifications by scholars (Polanyi, 1966; Nonaka, 1994; Johannessen, 1998; Grundstein et al., 2003). One of the most widely referenced classifications in management studies is from Nonaka's (1994) and Nonaka and Takeuchi's (1995) theoretical papers on the creation of organisational knowledge. These build on Polanyi's (1966) philosophical concepts of tacit knowing and explicit knowledge. Polanyi (1966, p.16) explains 'explicit' as codified knowledge that can be transmitted formally and 'tacit' as "knowledge deeply rooted in action, commitment and involvement in a specific context". Nonaka's (1994) work is relevant for it brings Polanyi's philosophical concepts of knowledge into a more practical context and reinforces the subjective dimension of knowledge (tacit), through the notions of beliefs and commitments alongside a more traditional concept of objective knowledge.

The concept of tacit and explicit knowledge is a key debate in the literature on the properties of organisational knowledge. Some scholars, such as Nonaka (1994) and Nonaka and Takeuchi (1995), see tacit and explicit on the same scale of knowledge, with new knowledge created from their interaction. However, others, such as Cook and Brown (1999), see them both as distinctive and complementary with the view

that each has a particular role and that new knowledge emerges as the result of human interaction with the social world. Nonetheless, both approaches are similarly based on the work of Polanyi (1966) for they acknowledge that tacit is highly contextual and difficult to communicate and that explicit is codified in practices and routines and more easily accessible and available (Nonaka, 1994; Spender and Grant, 1996). The underlying difference is noticeable in their interpretation of tacit knowledge. Nonaka's approach is based on mental models and values and relates to the dimensions of practical and cognitive knowledge where the first encompasses the idea of 'know-how' and the latter the idea of individual beliefs and opinions.

Meanwhile, Cook and Brown relate to the dimension of social knowledge, namely knowledge embedded in social interactions in the organisation which comes into effect in practice. Although Nonaka also recognises the notion of social interaction this only relates to interactions between individuals in the conversion of tacit to explicit and explicit to tacit. By acknowledging social interactions, Cook and Brown provide a more dynamic concept of knowledge. Nonetheless, the consideration of Nonaka (1994) offers some understanding of tacit knowledge as a personal concept and of the contribution that cognition and practice jointly make to the interaction between tacit and explicit, which he sees key in the conversion from individual to collective knowledge.

The positive role of tacit knowledge is extensively considered in the literature as bringing the greatest value to organisations and as a contributor to quality knowledge (Smith, 2001). In fact, Wagner and Sternberg (1987) claim that organisational success results from gaining and managing tacit knowledge. Furthermore, Gamble and Blackwell (2001) find that organisations that overlook tacit knowledge reduce their innovation. Although, Pérez-Luño et al. (2011) find that it has no particular effect with regard to radical innovation. In the context of legal services, which they describe as a codified environment, Marchant and Robinson (2009) stress the role and relevance of tacit knowledge by drawing attention to the cognitive attitude developed by establishing correlations between legal cases; this is needed and key to enabling the interpretation and navigation between ambiguous legal rules. In the context of consultancy services, Haas and Hansen (2007) also find that, while tacit knowledge, in the form of advice received from experienced colleagues, does not lead to time

saving, it nonetheless enhances the quality of organisational work. In addition, Brown and Duguid (1998) consider explicit knowledge as lacking the experience content that is necessary to sustain long-term competitive advantage.

Cheng, 1984 (cited in Phelps et al., 2012, p.1130) argues that the nature of tacit knowledge does not enable organisations to transform it into new knowledge. However, Nonaka's (1994) knowledge creation model shows the development of new knowledge from tacit to tacit through the process of socialisation, namely through the sharing of experiences. Nonetheless, in contrast to Brown and Duguid (1998), Nonaka (1994) reinforces the role of explicit knowledge by stressing that the practical benefits of knowledge are basically made through externalisation, namely when knowledge is converted from tacit to explicit. However, in order to be considered explicit knowledge a common understanding or common sense-making needs to have been reached within a particular structure (Grundstein, et al., 2003), such as an organisation, if not, it can only be considered as information.

In her paper on the role of explicit and tacit knowledge in organisations, Smith (2001) provides a comprehensive list of the use of both types, which draws attention to the different contributions that each type can offer with no consideration of one being more valuable than the other. Furthermore, Haas and Hansen's (2007) paper argues that different types of knowledge cannot replace each other. Therefore, both types of knowledge are significant and need to be considered as mutually complementary for they contribute to the achievement of competitive advantage (Smith, 2001).

However, it has been highlighted that the distinction between tacit knowledge and explicit knowledge is a generalisation (Agrawal, 2014), and further types of knowledge have been identified in the literature. For instance with reference to systems thinking theory, Johannessen (1998) builds on Polanyi's (1966) categorisation to consider a third and more abstract type of knowledge that is referred as 'hidden knowledge'. He describes it as knowledge that constructs our suppositions and motives, and which can generate conflicts when it remains hidden. Johannessen finds that tacit and hidden knowledge require the conditions of trust and cooperation in a system to allow some form of communication that can stimulate learning and innovation. Contrary to Gamble and Blackwell (2001), he further adds

that tacit knowledge can be an obstacle to innovation for it implies a long-term process of learning that is contrary to the required fast approach to innovation. This is particularly the case if continuous, although, at the same time, it also acts as a protector to imitation. However, Johannessen's notion of hidden knowledge is not comprehensively explored and does not contribute to any further understanding since his discussion remains limited to the notion of explicit and tacit knowledge.

In contrast, Smedlund (2008b), who like Cleary (2009) draws attention to the value of knowledge, provides a clearer typology of knowledge building for the three types of knowledge identified by Scharmer (2001): these are explicit, tacit-embodied and selftranscending (not yet embodied), of which the latter he refers to as potential knowledge. Smedlund interprets potential knowledge, as a latent capability likely to surface when in the right structure, such as, for instance, the business acumen of a prospective employee likely to result in innovation. The original work of Scharrmer (2001) seeks to introduce a third dimension of knowledge in order to shift organisational interest from outcomes and processes to assumptions: this leads to the materialisation of processes. He believes that, in the current knowledge-based economy, organisations need to develop sensing ability and awareness to potential opportunities before these formalise. Based on Scharmer's assumption that each knowledge type requires a particular social structure or 'knowledge environment' to evolve, Smedlund (2008b) finds that all three types are required. Therefore, explicit knowledge (i.e.: databases) creates organisational value through production, potential knowledge (i.e.: new technology) through innovation and the sharing and transfer of tacit knowledge (individual knowledge) generates learning benefits, which enhance organisational performance. The concept of organisational awareness is further featured by Snowden (2002) who claims there is a new stage beyond tacit/explicit knowledge that considers knowledge as a thing and as a flow or relational process that requires not only to focus on its content but also on its context (culture) and use of narrative. Snowden draws attention to the need for selfawareness in organisations as opposed to the use of analytical practices, to allow a flow of interactions that lead to new meaning. The suggestion of a third type of knowledge enhances the scope and discussion on the concept of knowledge, which, in the literature, remains focused on the two characteristics of tacit and explicit knowledge.

## 2.4.3 Collective and individual knowledge

Spender (1994) provides a matrix highlighting the four dimensions of intellectual capital that combine the facets of explicit and tacit with individual and collective knowledge (Table 2.4). The multidimensionality of the model reflects the flowing notion of knowledge and strengthens the view that each type is distinctive from the other and that each has its own contribution (Cook and Brown, 1999).

	Individual	Collective/social
Explicit	<b>Conscious knowledge</b> Facts, concepts, and frameworks that can be stored and retrieved from memory or personal records (personal notes, notebooks)	<b>Objectified knowledge</b> Shared corpus of knowledge (I.e. scientific community)
Tacit	Automatic knowledge: Theoretical and practical knowledge of people and the performance of different kinds of artistic, athletic, or technical skills (traditions, community of practice)	<b>Collective knowledge:</b> Embedded in social and institutional practice. Relies on the tacit experience and enactment of the collective

Table 2-4 Four dimensions of knowledge (Source: Spender, 1994)

Spender moves from the traditional focus on knowledge from an individual perspective to groups and organisations, and considers the idea of collective practice or a body of knowledge as well as individual expertise (Cook and Brown, 1999).

Hecker (2012) claims that, while the concept of collective knowledge is extensively used in organisational studies, it is often too broadly defined and its meaning is not always clear. His paper, one of the few to provide a comprehensive focus on collective knowledge, provides a deeper understanding of the concept and identifies collective knowledge as knowledge that is shared, complementary and embedded in collective artefacts. In essence, knowledge shared by a group implies common cultural or work experiences and can be shared formally (in training) or informally (within a community of practices). Complementary knowledge brings different individual knowledge together, based on the principles that the resulting knowledge is greater than the sum of each contribution. With regard to embedded knowledge, Hecker refers to concrete collective assets in the form of documents, processes or guidelines and principles.



Figure 2-2 Interdependencies between Types of Collective Knowledge (Adapted from Hecker, 2012)

The literature also makes reference to individual knowledge. In fact, in organisations individuals are considered as the main source of knowledge (Argote et al., 2003) since, in contrast with industrial economy, within a knowledge-based economy it is not organisations but individuals who own knowledge, which is source of competitive advantage (Roos and Roos, 1997). The work of Nonaka (1994) draws attention to the concept of individual knowledge, which sees individual experience as the underlying element in the creation of tacit knowledge in organisations. He claims that the more diverse an individual's experiences, the higher the quality of tacit knowledge and that routinised experiences will, in the long-term, decrease creativity and the development of new knowledge.

Smith et al. (2005) also stress the role of individual knowledge as a resource to influence the organisational capabilities of knowledge creation, and consequently innovation. Nonetheless, in order to be exploited and remain beneficial to organisational processes, such as innovation, individual knowledge needs to be networked and shared through relationships and formalised (Nonaka and Takeuchi, 1995; Grundstein, 2000; Subramamian and Youndt, 2005), which strengthen this

study's argument about the relevance of interactions within and between organisations and the role of structural capital. However, Argote et al. (2003) claim that, in groups individual knowledge is not as well considered as knowledge that is collectively owned; this can result in overlooking potential resources available. While their argument reflects the possible difficulty in sharing individual knowledge it cannot be generalised since Argote et al. (2003) recognise that this consideration is often dependent on the expertise of the individual and their level of integration in the group.

#### 2.4.4 Knowledge capital and the innovation process

In addition to relationships within the task environment the innovation process is closely associated and reliant on knowledge, which is an intrinsic social capital resource as well as an internal organisational asset (Nahapiet and Ghoshal, 1998; Adler and Kwon, 2002; Herrera et al., 2010; Mahr et al., 2014). Herrera et al., (2010) underline this association by stating that the innovation process creates and gathers knowledge while knowledge influences its performance based on how it is combined and exploited.

The implication of knowledge has been conceptually reflected within innovation process models such as those by Utterback (1971) and Robertson (1974), which have been previously acknowledged in this chapter (Table 2.2). Both Utterback and Robertson recognise the influence of technical knowledge in the process of product innovation. Empirical studies, such as that by Mahr et al. (2014) also underline the concept of knowledge and the innovation process through knowledge co-creation in large manufacturing and large service organisations, such as retail, financial and technology. The study shows that the participation of customers through solid communication channels results in the integration of knowledge as a resource that is particularly influential during the process of innovation. Their main focus is on measuring the contribution of knowledge with regard to outcomes, such as learning, relevance and newness of knowledge, throughout the innovation process. Similarly, in a large pharmaceutical organisation, Kazadi et al. (2016) investigate the contribution of knowledge co-creation with stakeholders during the innovation process; the qualitative nature of the study provides insights into how knowledge emerges from the relationships with two key stakeholders. However, whilst both

studies highlight the relevance and benefits of inter-organisational relationships and knowledge throughout the process, the main focus remains, respectively on the measurement of the co-relationship with specific identified outcomes in a process of product innovation, and the management of co-creation initiatives with regard to product innovation.

Studies, such as Herrera et al.'s (2010), have considered the innovation process with reference to external knowledge, stressing that external knowledge influences the innovation process, and that the innovation process is reliant on knowledge. The quantitative investigation of Herrera et al. (2010) in Spanish manufacturing confirms that knowledge gained from external public researchers positively influences the inputs and outputs of the innovation process. This knowledge combined with their own knowledge incentivises the development and application of a new additional knowledge. They use the indicators of R&D intensity and patent propensity, and commitment to R&D activities to measure the influence of knowledge on the process. However, their focus is on the measurement of organisational performance, as opposed to the exploring of concrete implications of knowledge on the innovation process.

Schweisfurth and Herstatt (2016) take the external and internal organisational knowledge into account in their investigation on the contribution of employees' knowledge to product innovation. Schweisfurth and Herstatt consider employees as 'embedded users'; this implies that they are external users of the products developed in their organisation, as well as internal users. The study shows that employees use resources and capabilities during the three main stages of the product innovation process (ideation, development and marketing). However, similar to Herrera et al. (2010), the focus is not on the implication of knowledge on the innovation process but on organisational innovation performances. Nonetheless, they highlight that employees use knowledge and social resources to innovate, which validates the influence of knowledge and social capital on the product innovation process.

The innovation process has also been investigated with reference to the type of knowledge, with a usual focus on tacit knowledge. These investigations have evidenced the relevance and the influence of tacit knowledge on the innovation

108
process. Basadur and Gelade (2006) consider a four-stage process (generating, conceptualising, optimising and implementing) and tacit knowledge in a framework, which application seeks to enhance organisational effectiveness. However, the emphasis is on the utilisation of tacit knowledge to enhance effectiveness, and the innovation process remains a guiding construct to draw specific attention to the action of individuals in organisations with regard to their management of knowledge. Consequently, no specific insight is provided on the influence of tacit knowledge on the innovation process. Similarly, Howells (2001), who investigates the relationship between the innovation process and tacit knowledge, gives more attention to the influence of geography on the relationships. The paper provides an in-depth theoretical analysis of knowledge, however the concept of innovation process is not outlined or reviewed.

A more specific consideration of the influence of tacit knowledge on the innovation process is highlighted in Seidler-de Alwis and Hartmann's (2008) paper. Their conceptual analysis on the effect of tacit knowledge transfer on organisational innovative capabilities stresses that tacit knowledge is significant at all stages of the innovation process, and particularly, at the beginning of the process. However, the concept of innovation process is not clearly defined, and the assumptions that are derived from existing studies remain to be empirically validated. The comprehensive analysis of Koskinen and Vanharanta's (2002) on the role of tacit knowledge on the innovation process in small technology organisations also underlines the influence at each stage of the innovation process. Similar to Seidler-de Alwis and Hartmann (2008), tacit knowledge is found to be relevant at the beginning of the process. However, their conceptual paper implies a product innovation process, and do not consider service innovation. Contrarily, Cavusgil et al. (2003) who investigate empirically the relationships between tacit knowledge and the innovation process, acknowledge the context of services in the US, along with manufacturing. However, whilst the size of the studied organisations is not specified, their reference to R&D process implies the investigation of large organisations.

## 2.5 Structural Capital

#### 2.5.1 Conceptualisation of structural capital

Similar to knowledge, structural (organisational) capital is one element of intellectual capital (IC) alongside human capital and relational capital (Cleary, 2009; Grimaldi et al., 2012; Wijayanti et al., 2012). All three concepts are connected and relevant on the basis that intellectual capital is "knowledge that can be converted into value" (Edvinsson, 1997, p. 358). Grundstein (2000) draws attention to the particular relevance of structural capital with his claim that organisations need to capitalise knowledge, which requires it to be located (identified, located, characterised and classified), preserved (conserved, conceptualised, formalised), value enhanced (accessed, disseminated, used effectively, combined to create new knowledge) and maintained (evaluated, updated, confidential and secure).

The literature brings to light contrasting views on the consideration of structural capital, and definitions are often based on the view of different authors. For instance, in a software solutions organisation, the work of Peppard and Rylander (2001) on growth strategy refers to structural capital as a value creator as opposed to a human resource. Peppard and Rylander (2001) claim that, instead of fostering individual knowledge of human capital, there is a need for organisational procedures to solidify the experience of employees and their tacit knowledge. Their view contrasts with Edvinsson (1997) who sees it more as an inclusive process, where human capital is converted into structural capital and where structural capital is a supportive structure that allows organisations to exploit their human capital.

Matthies (2014) provides an illustration of structural capital by drawing attention to the concept of process capital; this enables a better understanding of the concept and its place in the bigger picture of intangible capital (Figure 2.3). Based on Edvinsson and Malone's (1997) definition, process capital is referred to as a component of organisational capital, where the latter is a component of structural capital. Moreover, it encompasses the competencies and captured knowledge of organisations that create organisational value. The elements of knowledge and competency help to conceive structural capital more concretely, and make Edvinsson's (1997) link between human resources and organisational structure more evident given that knowledge is inherent in "routines, processes, strategy and culture, which codify and preserve memories" (Rahim et al. 2011, p. 745). Grimaldi et al. (2012, p. 172) also highlight knowledge and capabilities as they state that structural capital is the "available capabilities and the acquired knowledge mastered by the organizational structure itself".



Figure 2-3 Classification of Intellectual Capital (Source: Edvinsson and Malone, 1997, p.52, in Matthies, 2014, p.93)

Kianto et al (2017), who build on the meaning of several scholars, provide a clear explanation of structural capital as they refer to a non-human and collective frame that allows for knowledge to remain in the organisation once employees have left. They consider structural capital in terms of established configurations, norms and practices that help organisations to efficiently record and preserve knowledge, and in terms of information and communication technologies (ICT) based systems that allow for information to be stored, retrieved, shared, transferred and analysed. Furthermore, they see both forms as conducive to innovation in that they offer a continuous access to knowledge that can be used to develop and test new ideas.

The reference of Kianto et al. (2017) to norms and routines and ICT draws attention to the earlier specification of structural capital in the literature. For instance, the seminal work of Edvinsson (1997) distinguishes between direct and indirect structural capital, where each can be tangible or intangible. Structural capital is direct (support that touches human resources) with tangible (desks, telephone) and intangible (work procedures, plans, organisation know-how) and indirect (support that touches the people who touch the human resources) with tangible (building, electricity) and intangible (payroll systems). Stewart (1999) sees the tangible element of structural capital as that which allows organisational knowledge to be codified, stored, transmitted and shared. Based on the studies, namely Edvinsson (1997) and Kianto et al. (2017), this study acknowledges structural capital as both tangible and intangible capital that consists of practices, and ICT based systems.

The tangible and intangible notion of structural capital is highlighted in subsequent studies. For instance, in Rahim et al.'s (2011) research, the tangible dimension consists of organisational databases, documents, and procedures and patents whilst the intangible dimension relates to organisational culture and trust. Both dimensions are viewed as essential in the performance of organisations. Rahim et al. (2011) find that strong policies, processes and procedures, such as guidelines and manuals, in addition to a culture that provides career development support for employees in their work, lead to enhanced organisational performance. However, the work of Rahim et al. (2011) is based in one large telecom organisation in Malaysia and does not offer a comparison with other organisations in that particular market.

The distinction between tangible and intangible structural capital is also illustrated in the study of Zangoueinezhad and Moshabaki (2008) through the notion of structural and organisational intelligence (SOI), which they see as equivalent to structural and organisational capital. SOI encompasses both aspects in the form of organisational culture and learning, and information systems and operating processes. Their study recognises the value of structural capital through the positive role of SOI in gathering competitive intelligence that leads to increased competitive advantage by producing better insights at a lower cost. However, the responses from large, and mainly public organisations in Iran is likely to provide highly contextualised insights that are dependent on the cultural particularities of business operations and characteristics of market competition and conditions, such as geographical restrictions to the exchange of information between organisations. Furthermore, their performance measurement of systems and operating processes does not provide additional insight on what these systems and processes are and the possible motivations for, and methods of their use. Interestingly, Zangoueinezhad and Moshabaki (2008) consider that structural capital through information systems is used to establish better communication with the task environment, such as with customers and partners, for it subsequently provides opportunities to enhance sources of knowledge. Similarly, Gogan et al. (2015) recognise the role of structural capital as facilitating communication in addition to sharing knowledge. Therefore, in addition to acknowledging structural capital as practices and systems for the recording, storage and communication of knowledge, the study acknowledged structural capital as practices and systems aimed at establishing better communication with the task environment.

#### 2.5.2 Structural capital and the innovation process

Structural capital, which acts as a supporting function to social and knowledge capital, is recognised to influence the innovation process (Wijayanti et al., 2012). However, the literature on structural capital and the innovation process is limited. This supports the earlier claim of Edvinsson (1997) that structural capital has not been considered key to organisations, as opposed to customers and products. Despite the increasing focus of recent organisational studies on intangible assets, the topic of structural capital has remained overlooked. This is evidenced, for instance, by the fact that the measurement of structural capital is viewed as a new concept. Although, several models have been developed to measure IC (Sydler et al., 2014), Gogan et al. (2015) generate a framework to measure structural capital with the argument that the development of such models is required in order to establish the particular benefits that structural capital provides. Their model is tested in one

university in Romania and refined from feedback, but still needs to be empirically validated. Interestingly, Gogan et al. (2015) add that, although there is a need to refer to different authors when defining structural capital, the common agreement is that structural capital refers to a non-physical asset.

Studies that have investigated structural capital have done so within the overall component of intellectual capital, which consequently limits the discussion on the topic. Nonetheless, the studies show that innovation is influenced by structural capital. For instance, in the seminal work of Subramaniam and Youndt (2005) structural capital is found to positively influence the capabilities of organisations for radical innovation. Furthermore, Machado Engelman et al. (2017), highlight the influence of structural capital on the internal capacity of manufacturing organisations to acquire, assimilate, exploit and transform knowledge, which leads to product innovation. Additionally, in the context of SMEs, McDowell et al (2018) find the positive influence of structural capital on the modes of product innovation (incremental, radical) and consequently on organisational performance. They stress that the development of organisational processes is one key element to ensure organisational performance. McDowell et al. (2018) highlight that organisational studies recognise structural capital as intangible capital (processes and practices). Gogan et al. (2015) support this in considering structural capital as intangible assets.

However, the work of Machado Engelman et al. (2017) also takes into account the form of tangible containers of codified knowledge such as guides and manuals. Furthermore, Delgado-Verde et al. (2016) refer to technological capital as they seek to differentiate between the processes of organisations and their technological investments and developments. Based on Edvinsson and Malone's (1997) classification (Figure 2.3), their notion of structural capital relates to innovation and process capital, which combines both tangible and intangible capital. Therefore, this highlights that both forms of structural capital need to be investigated. Overall, these studies highlight that the investigation of structural capital traditionally focuses on the quantitative measurement of the influence of structural capital on product innovation and modes of innovation in manufacturing. Furthermore, studies such as that by Kianto et al. (2017), which measures the relationships between HRM (Human Resources Management) and IC and innovation focuses on the influence of

knowledge with regard to innovation performances and does provide insight into the innovation process. Additional studies presented in the literature (Leitner, 2011; Kalkan, et al., 2014; Soo et al., 2017) strengthen that argument.

Nonetheless, the literature also focuses on the services sector. For instance, in the context of IT and R&D service organisations Carmona-Lavado et al. (2010) measure the effect of structural capital through the components of IC on manufacturing innovation capability. Furthermore, in financial services Chahal and Bakshi (2015) also investigate the impact of IC on competitive advantage. However, these remain quantitative investigations, which provide limited understanding of the influence of structural capital. Buenechea-Elberdin (2017) who presented the first literature review on IC and innovation confirms the propensity for quantitative investigations with regard to product innovation and organisational performance in large manufacturing organisations. She adds that, despite the emerging trends to consider services the sector remains particularly underrepresented. On the basis that services are reliant on knowledge, she claims that, along with the other components of IC, further exploration of structural capital is therefore needed, within the environment of current of knowledge-based organisations. Therefore the study sought to further contribute to the literature from the perspective of services.

Quantitative studies provide valuable insight on structural capital and innovation outcomes and performances. McDowell et al. (2018) find that the positive influence of structural capital on organisation performance is confirmed. Moreover, Carmona-Lavado et al. (2010) state that the indirect effect of structural capital on product innovation through social capital is also significant. This implies that communication and interactions in organisations can be stimulated with the help of explicit knowledge and thus consequently stimulate innovation activities. Their study stresses the relationship between structural and social capital and their effect on organisational innovation. However, with regard to radical innovation, the influence of structural capital is particularly weakened when organisations reach their technological capabilities (Delgado-Verde et al., 2016). With regard to knowledge, Machado Engelman et al. (2017) underline the positive influence of structural capital on the capabilities of organisations to acquire, assimilate and use knowledge as well as to create new knowledge, which all leads to enhanced product innovation

115

The study of Wijayanti et al. (2012) is one of the few to account for the structural capital component and the innovation process. Their quantitative investigation on the influences of structural capital on the innovation processes in manufacturing shows that contributions are dependent on the size of organisations and their use of technology is lower. Thus, structural capital further contributes to the innovation process in smaller organisations, such as entrepreneurs, where the use of technology is lower. However, these findings are particular to the context of Indonesian manufacturing where the conception of intangible resources remains unfamiliar, and the economy is reliant on the use of natural resources and a low-paid workforce. Furthermore, whilst Wijayanti et al. (2012) mention the innovation process, they refer to the achievement of organisational performance through innovation activities, as opposed to ways in which innovation occurs. Moreover, Wijayanti et al. (2012), similar to Carmona-Lavado et al. (2010), Chahal and Bakshi, (2015), Delgado-Verde et al. (2016), Machado Engelman et al. (2017) and McDowell et al. (2018), use a quantitative approach to research, which provides a limited understanding of the influence of structural capital on the innovation process.

Therefore, to the knowledge of the researcher the literature does not provide empirical findings on the innovation process and structural capital. The lack of consideration of structural capital and the innovation process, as a method to innovate, is acknowledged in the literature (Buenechea-Elberdin, 2017). The emphasis of studies on innovation outcomes and organisational innovation performances highlights a need to explore the additional facets of innovations to develop a concept that is more comprehensive. In fact, according to Buenechea-Elberdin (2017) the development of frameworks in IC studies that are based on innovation outcomes, and that do not consider the process followed to generate these outcomes, provides only a limited understanding of organisational innovation. This reinforces the motivations for the study to contribute to the literature on the innovation process and structural capital in the context of services.

# 2.6. Social, knowledge and structural capital and the Resource-Based View (RBV)

It is relevant to discuss social, knowledge and structural capital in relation to the notion of resource-based view (RBV). Indeed, the RBV theory, which is acknowledged as significant to competitive advantage, supports that organisations can maintain a competitive advantage by effectively using and managing valuable resources that are hard to imitate (Barney, 1991; Peteraf, 1993; Demartini, 2015). This statement is particularly applicable to intangible resources, which hold such characteristic that is essential to the development of organisational strategies (Hitt et al., 2006, in Hitt et al., 2016, page 78). The literature highlights that whereas scholars have explored intangible assets in the context of organisations, these assets have not always been taken into account with the RBV theory (Kraaijenbrink, 2011).

Nonetheless, the literature presents conceptual and empirical works on social capital and RBV. For instance, Gupta et al. (2011) examine the relationship between internal social capital in self-managed teams and performance. They apply a resource-based theoretical framework, to establish social capital as a unique intangible resource that adds value to the team and consequently enhance its performance. Their focus is on relationships within organisational teams in the context of US universities. In the context of small and medium export organisations Roxas and Chadee (2011) also find a positive relationship between social capital and the acquisition of export related knowledge. This acquisition enables organisations to enhance their export performance, which subsequently feeds into their entrepreneurial orientation, that is to say their behavioural response to investment and innovation risks, among others. Their study relates to the sector of manufacturing in Southeast Asia and their finding is therefore compatible with the specific challenges in that context. Nonetheless, Roxas and Chadee (2011) emphasise external social capital as well as internal, based on the need to consider the social context of organisations.

However, some studies, such as Campbell et al's. (2017), have drawn attention to a lack of relationship between social capital and organisational performance. The quantitative approach applied by Campbell et al's. (2017) leads them to the supposition that social capital is an outcome of the efforts made by small organisations as opposed to an antecedent to performance benefits. The theoretical

paper of Chisholm and Nielsen (2009), which seeks to integrate social capital in organisational theories, discusses social capital from a broader organisational perspective and considers both internal and external relationships. In contrast to Campbell et al. (2017), Chisholm and Nielsen (2009) stress the importance to invest in social capital to better compete and enhance financial performances. However, they underline the requirement for further research, with the claim that social capital needs to be further understood at an organisational level.

The literature also highlights the concept of knowledge from the perspective of RBV. Chisholm and Nielsen (2009) state that the intangible asset of knowledge is crucial to organisations. Their work underlines the particular relevance of the tacit knowledge of employees based on that, increasingly, their knowledge influences outcomes and should be regarded as a valuable asset. They view knowledge as a collective asset, in which all employees are required to take part in its creation, exchange and exploitation. Similarly, in the previously mentioned work of Roxas and Chadee (2011) on social capital and RBV, the resource of knowledge generated through social relationships is considered and described as as core resource that support the orientation of entrepreneurial organisations. Both, Chisholm and Nielsen (2009) and Roxas and Chadee (2011), evidence the link between social capital, knowledge and RBV based on the argument that to create new resources knowledge needs to be combined with social interactions. Kraaijenbrink (2011) also draws attention to the notion of individual knowledge resource and RBV, through the concept of Human Capital (HC). His notion implies, in addition to the conscious and automatic knowledge of tacit and explicit knowledge (Spender, 1994), the ability of employees to influence, not only outcomes, but also their own expertise. This ability is viewed as reflecting motivation. Additional studies have investigated knowledge from a RBV perspective through the concept of HC (Shaw et al., 2013; Nyberg et al., 2014; Bendickson and Chandler, 2017). However, according to Kraaijenbrink (2011) this approach focuses on the internal environment and does not consider explicitly knowledge that is gained from outside organisations.

Structural capital is also acknowledged in studies through the resource of HC. For instance, the work of Chisholm and Nielsen (2009) refers that the structure of organisations contains the knowledge of employees. Kraaijenbrink (2011) also

recommends the application of tangible and intangible resources to organisations, such as patents and systems, to capture and subsequently further value the knowledge of employees. Kraaijenbrink (2011) emphasises the collective practices and shared culture of organisations, which develop over time. Furthermore, Tabatabaei Nasab et al. (2013) investigate the link between structural capital, with other intangible assets (human, relational and technological capital, and corporate reputation), and export behaviour in Iran. Their findings show that structural capital has the lowest influence on export behaviour. Nonetheless, the combination of all the intangible assets is found to strengthen competitive advantage by contributing to maintain a permanent presence in international markets. Their study recommends export organisations to reinforce their strategies with regard to intangible assets. However, the finding of Tabatabaei Nasab et al. (2013) is based on a low response rate (53%), which implies a lack of representativeness. In their conceptual paper, Radenović and Krstić (2017) examine the role of IC in creating and sustaining competitive advantage. They acknowledge the component of IC as structural, relational and human capital, which they define. However, they focus on the relevance of the overall IC resource, and the role of each capital is not examined. Therefore, no insight is provided on the role of structural capital from a RBV perspective.

#### 2.6.1 Competencies and capabilities

Social, knowledge and structural capital are intangible resources that are important to CA, particularly in small organisations for they have limited resources (F-Jardon and Gonzalez-Loureiro (2013). To influence innovation and other organisational performances, resources need to be strategically combined and managed to develop capabilities and core competencies (Sirmon et al., 2007; Chisholm and Nielsen, 2009; Demartini, 2015). F-Jardon and Gonzalez-Loureiro (2013) provide a clear explanation of each concept based on the literature. Resources are tangible or intangible assets that are used by organisations for their production. Capabilities are described as the strategic deployment and use of resources to achieve a required outcome. Finally, core competencies encompass resources, capabilities and external influences. These, which are often difficult to imitate, lead to competitive advantage when they influence organisational performances.

Bryson et al. (2007) also underline the relevance of distinctive competencies. Whilst distinctive competencies help achieve organisational aims and successes they are also specific to the organisation and are therefore hard to imitate, which enables a long-term success. Mishra and Shah (2009) highlight the relevance of collaborative competences in the developing of new products, which consequently leads to CA. They stress the need for collaboration with external stakeholders to influence projects, which in return enhance market performances.

However, in their extensive review of the literature Hitt et al. (2016) highlight the confusion and lack of clarity regarding the distinction between resources and capabilities. The literature on RBV presents an extensive of studies that identify, evaluate and measure competencies and capabilities (Anderson et al., 2001; Bryson et al., 2007; Melián-González, 2010). In agreement with Hitt et al. (2016), the interchangeable use of both concepts often leads to a confusing understanding of each. A more limited number of studies consider intangible resources with regard to competencies. Nonetheless, social capital is found to have a strong effect on core competencies in the entrepreneurial context. The quantitative work of Al Mamun et al. (2016) confirms this influence in Malaysia and suggests the need to identify and establishing communication through networks. Similarly, in manufacturing Cheng et al. (2008) highlight the strong influence of social capital on core competencies and recommendations are made for social capital to be part of management practices to assist in their development.

Core competencies often apply the theoretical concept of dynamic capabilities (F-Jardon and Gonzalez-Loureiro, 2013). This concept enables to further understand the contribution of resources to competitive advantage over time, as it implies that organisations build capabilities to modify other capabilities that are needed to achieve and maintain a competitive advantage (Eisenhardt and Martin, 2000; Hitt et al., 2016). In the sector of tourism, Nieves and Haller (2014), who investigate the antecedents of dynamic capabilities, show that individual and collective knowledge is essential in achieving dynamic capabilities. Similarly, Villar et al. (2014) stress the important role of knowledge in dynamic capabilities in SMEs exporter organisations in the high tech industry. Furthermore, Migheli (2011) finds that social capital contributes to achieving new organisational capabilities. These capabilities also enable to enhance their social capital by developing and accessing new valuable relationships. In the Spanish food industry, Rodrigo-Alarcón et al. (2018) find that social capital generates dynamic capabilities, which influences the entrepreneurial orientation of organisations. With regard to structural capital, Singh and Rao (2016), who investigate the Influences of structural capital on dynamic capabilities, through the components of IC, show that structural capital has limited influences on specific capabilities (reconfiguration and management of alliances). Their study is specific to the public sector in India. Daou et al.'s (2013) qualitative exploration of IC in small organisations shows that, while organisations are aware of the relevance of structural capital related procedures to achieve new capabilities, these are not implemented due to a lack of skills and priority. Overall, whilst the majority of quantitative studies on social, knowledge and structural capital, and dynamic capabilities do not provide deeper understanding on these correlations, valuable recommendations and implications are made with regard to the significance of their acknowledgment and management in these changeable environments. Furthermore, they provide frameworks that reinforce the link between intangible capital and the theoretical perspective of dynamic capabilities.

# 2.7 Key characteristics of social, knowledge and structural capital

The key characteristics of social, knowledge and structural capital highlighted in the literature review are presented in the below Table 2-5.

	Characteristics	Key references
Social capital	External	Bourdieu (1986); Burt (1992);
		Portes (1998); Partanen et al, (2008)
	Internal	Coleman (1988); Fukuyama (2001);
		Putnam (1995)
	Internal and external	Nahapiet and Ghoshal (1998);
		Adler and Kwon (2002)

	Ctrustural	Notworktion	Cranewatter (1072): Maradan and
	Structural	Network ties	Granovetter (1973); Marsden and
	dimensions		Campbell (1984); Burt (1992); Nahapiet
			and Ghoshal (1998); Hansen (1999);
			Lin (1999); Gulati et al. (2000); Adler
			and Kwon (2002); Inkpen and Tsang
			(2005); Gabbay and Leenders (2001)
		Network	Krackhardt (1989); Inkpen and Tsang
		configuration and	(2005)
		density	
	Relational	Trust,	Granovetter (1973); Burt (1992);
	Dimensions	trustworthiness,	Putnam (1995); Gulati et al. (2000);
		norms, sanctions,	Coleman (1998); Nahapiet and Ghoshal
		expectations,	(1998); Fukuyama (2001)
		obligations,	
		identification and	
		identity	
	Cognitivo	Sharad	Nahaniat and Chaphal (1008): Tabi and
	Cognitive		
	aimensions	understanding,	Gnosnal (1998); Gulati et al., 2000)
		codes and	
		paradigm	
Knowledge	Internal and		Roos and Roos (1997); Steward
Capital	external		(1999); Cleary (2009)
	Tacit and	Know-how and	Polanyi (1966); Wagner and Sternberg
	Explicit	codified	(1987); Nonaka (1994); Nonaka and
	knowledge		Takeuchi (1995); Spender and Grant
			(1996); Brown and Duguid (1998);
			Cook and Brown (1999)
	Hidden	Construct of	Johannessen (1998)
	knowledge	suppositions and	
		motives	
	Potential/ self		Scharmer (2001); Smedlund (2008b)

	transcending	
	knowledge	
	Individual and	Spender (1994); Cook and Brown
	Collective	(1999); Grundstein (2000); Argote et al.
		(2003); Hecker (2012)
Structural	Tangible and	Edvinsson (1997); Stewart (1999);
Capital	Intangible	Subramaniam and Youndt (2005)

 Table 2-5 Key characteristics of social, knowledge and structural capital (Source: Author)

# 2.8 The framework of social, knowledge and structural capital

Studies that investigate intangible assets have commonly applied the theoretical framework of Intellectual capital (IC). Most often the framework encompasses the three dimensions of relational/social, human and organisational/structural capital (Stewart, 1999; Cleary, 2009; Carmona-Lavado et al., 2010; Liu, 2017; Machado Engelman et al., 2017; Buenechea-Elberdin, 2017). For instance, in large US public organisations Subramaniam and Youndt (2005) apply an Intellectual Capital (IC) framework to measure the effect of social capital, human capital and structural capital on modes of innovation. Additional components such as customer, technological and spiritual capital, have also been identified (Khalique et al., 2011).

However, whereas human capital reflect the concept of knowledge this dimension only relate to the internal knowledge of employees (Stewart, 1999; Coff, 2002; Menon and Pfeffer, 2003; Schweisfurth and Herstatt (2016) the dimension omits knowledge sourced from the task environment. However, as one of the two components of capital (Marshall, 1965, in Nahapiet and Ghoshal, p.245) it is relevant to emphasise that both, internal and external based knowledge are influential to innovation (Nahapiet and Ghoshal, 1998; Subramaniam and Youndt, 2005; McDowell et al., 2018).

Studies have justified the consideration of relational, human and structural capital in the IC framework, based on that each has the potential to create value to

organisations and to enhance performances (Kamukama, 2013; Demartini, 2015). Nonetheless, there is no suggestion that this combination is the most representative. In fact, according to Buenchea-Elberdin (2017) the increasing relevance of knowledge-based capital and the fast progress of digital technology have influenced organisations and their environments. Consequently, other combinations are likely to provide a more up to date illustrative framework of organisational intangible assets, particularly with regard to innovation. Moreover, as the concept of IC is fairly new to the field of management, its use and interpretation, particularly with regard to the innovation processes, is open to interpretation (Kong, 2010). Based on these arguments the study aims to contribute to the discussion on intellectual capital with the first application of a theoretical framework of intangible assets that encompasses knowledge as capital, in addition to social and structural capital.

# 2.9 Analysis of the theoretical gap and establishing the theoretical background of the study

Studies such as those by Utterback (1971) and Robertson (1974) make references to influences on the innovation process that are internal and external to organisations. This includes, for instance, technical and scientific knowledge, and socio economics. Furthermore, some models consider the complexity of innovation, which is reflected by their non-linear processes, as illustrated in the model of Van de Ven et al. (1999, 2008). Nevertheless, although service innovation process models take internal influences into account, they do not reference influencing elements that are external. This is evidenced in the models of Bowers (1989), Edgett and Jones (1991), Edvardsson et al. (2000) and Heusinkveld and Benders (2002), where organisational culture and strategy is particularly highlighted. This lack of reference is also evident in Toivonen's (2010) framework that illustrates the structural nature of the service innovation process.

However, studies, such as those by Smedlund (2008a) and Ommen et al. (2016) stress that the service innovation process relies on inter-organisational relationships whose benefits are enabled by social capital. Furthermore, the service innovation process is reliant on knowledge and structural capital, as indicated by Mahr et al., (2014) and Wijayanti et al. (2012). As organisations increasingly focus on intangible

resources, an additional understanding of intangible assets is needed (Edvardsson et al., 2000; Gogan et al., 2015; Bryan et al., 2017). However, there is no theoretical link between the service innovation process and social, knowledge and structural capital to provide a deeper understanding of service innovation. This argument is reinforced by the literature, which shows that whilst innovation has been investigated with respect to social, knowledge and structural capital, most attention has been paid to innovation performance, the modes of innovation, and the outcomes of product innovation, as opposed to the service innovation process. The study therefore aims to address this gap and to contribute to the current body of knowledge in this subject area.

Furthermore, both early and more recent studies that have considered the service innovation process, and the influence of social capital, have focused on the context of manufacturing and large service organisations, such as banking and insurance, amongst others, rather than small service organisations; for instance, Bowers (1989), Easingwood and Percival (1990), Syson and Perks (2004), Jimenez-Zarco et al. (2011), and Gremyr et al. (2014). Large service organisations are characterised by their systematised innovation process and production-intensive services, which leads to standardised services, that are consequently similar to products; thus, the service innovation process still needs to be investigated within small service organisations. Furthermore, despite considering the innovation process, the main purpose of these studies is to identify the innovation outcomes through the innovation process. Therefore, the influences of social capital on the innovation process have not been considered, and insights into the dynamics and constructs of social relationships have not been examined.

The literature presented studies that investigate the innovation process taking into account knowledge capital. However, these studies relate to product innovation, as opposed to service innovation, such as the theoretical works of Utterback (1971) and Robertson (1974) that encompass knowledge in their product innovation process model. This is further evidenced in the empirical works of Herrera et al. (2010), Mahr et al. (2014), Kazadi et al. (2016), and Schweisfurth and Herstatt (2016). Similar to studies on the innovation process and social capital, the main purpose of these

investigations is to quantitatively measure the relationship between knowledge and outcomes and performances via the innovation process. Therefore, the effect of knowledge on the service innovation process has not been qualitatively investigated. The literature also highlighted studies on the innovation process and the type of knowledge. However, these were mostly conceptual papers and referred to product innovation process.

The overall lack of empirical studies on structural capital provided limited insights on the topic, whilst the limited research on the innovation process and structural capital consists of quantitative investigations on product innovation outcomes and organisational performances. The study by Wijayanti et al. (2012) is one of the few study to consider both the innovation process and structural capital. However, the context is Indonesian manufacturing, and, despite referring to the innovation process, it seeks to measure organisational performance through innovation activities rather than investigate the way in which innovation is undertaken. In fact, the literature does not present any qualitative investigations of the innovation process that consider structural capital in the context of services. Based on these arguments, the study considered the investigation of the innovation process in light of social, knowledge and structural capital in the context of small service organisations.

As the concept of social capital is broad, the study focused on its structural and relational components. The consideration of both components is based on the evidence from the literature that both components are needed to provide a multidimensional and less restricted illustration of social capital. The structural component comprises the ties between the agencies and third parties from the task environment. The relational component comprises the toconcept of trust in relationships. Knowledge capital encompasses the theoretical characteristics of tacit and explicit knowledge, as well as individual and collective knowledge. Finally, the concept of structural capital comprises assets that are both tangible and intangible.

To consider the innovation process with reference to social, knowledge and structural capital meant adopting a comprehensive representation of innovation that allowed for a better understanding of the implications of each intangible asset (and their

126

components) on the innovation process. The literature highlights studies that adopt a comprehensive approach to investigate innovation with reference to organisational capitals. For instance, Martins and Terblanche (2003) believe that the most effective way to research organisational capital is through a systems approach. Similarly, Subramaniam and Youndt (2005) understand that innovation is influenced by the key characteristics of each capital. Moreover, Pérez-Luño et al. (2011) argue that their comprehensive approach allows for a consideration of the independent and joint effects of organisational capitals and innovation. This strengthened the argument to adopt a comprehensive approach in this study.

## 2.10 Social, knowledge and structural capital

The term capital acknowledges any form of wealth or resources that is available for the production of additional wealth (Oxford Reference, 2017). Increasingly, organisations are focusing on intangible capital for they are all key to competition, innovation and organisational performance (Edvardsson et al., 2000; Darroch, 2005, Robert et al., 2008; Gogan et al., 2015; Bryan et al., 2017). Social, knowledge and structural capital are all intangible capital; they represent a collection of what organisations view as significant to create value, which is not reflected in traditional accounting systems. Their worth is on the significance and the potential they provide as opposed to material (Rahim et al., 2011). However, in marketing based organisations intangible assets tend to be overlooked, despite that assets, such as knowledge and client relationships, which are intangible, are essential to their activities (Marr, 2005).

The concept of social capital enables to deepen the understanding of organisational relationships. Overall, it highlights the social aspect of economic activities and contrasts with the traditional acknowledgement that economy is transactional (Wulf and Huysman, 2004). The literature recognises that the embeddedness of personal and network relationships shape organisational activities (Granovetter, 1973) and more specifically that social capital is and antecedent to innovation (Landry et al., 2002). In the social capital (Brunie, 2009) that is manifested in organisations resources are embedded in relationships, whether internal or external (Adler and

Kwon, 2002; Leana and Pil (2006) and access to resources is provided. Amongst the different resources provided, knowledge is particularly relevant to the activities of service organisations (Smedlund, 2008b; Jimenez-Zarco et al., 2011; Mahr et al. 2014).

Service organisations operating in dynamic environment, such as in the digital marketing industry, require up to date knowledge to be innovative (Chaffey and Allen, 2016) and are therefore dependant on the knowledge that is embedded and generated from inter-organisational relationships (O'Mahoney, 2011; Kianto et al., 2010). Similar to social capital, knowledge is an antecedent to innovation (Subramaniam and Youndt, 2005; McDowell et al., 2018). The increasing investigation on the value of social networks and relationships with regard to knowledge also stresses the underlying tie between social and knowledge capital (Wulf and Huysman, 2004). Comparable to social capital, it is an internal and external based capital for it is located within organisations and inter-organisational relationships. As an internal asset knowledge relates particularly to organisational skills, abilities and expertise, which are necessary to innovation (Stewart, 1999; Coff, 2002; Menon and Pfeffer, 2003; Schweisfurth and Herstatt, 2016).

However, to better exploit their knowledge and inter-organisational relationships organisations require structural capital. As a supportive structure, which consists of practices and ICT-based systems (Zangoueinezhad and Moshabaki, 2008; Gogan et al. 2015) structural capital bridges the internal and external environment of organisations. It is complementary to social and knowledge capital as it helps to capture and communicate knowledge internally and with the task environment, and to enhance communication and consequently social relationships with the task environment (Edvinsson, 1997; Zangoueinezhad and Moshabaki, 2008; Gogan et al. 2015; Kianto et al., 2017). Nonetheless, contrary to them it is independent of people since it relates to knowledge owned by organisations and it is a non-thinking asset (Edvinsson and Malone, 1997; Roos and Roos, 1997). However, structural capital draws particular attention to the understanding of knowledge and social relationships as a creator of organisational value, and particularly of innovation (Edvinsson and Sullivan, 1996; Edvinsson and Malone, 1997; Peppard and Rylander, 2001; Matthies,



Figure 2-4 Intangible assets: Social, knowledge and structural capital (Source: Author)

## 2.10 Summary and Link

This chapter discussed literature on the topic of service innovation, and the innovation process, as well as on social, knowledge and structural capital. Overall, the literature review identified theoretical, empirical and methodological needs for the study and established that the innovation process is influenced by social, knowledge and structural capital in different contexts. Furthermore, the review identified the lack of a theoretical link between the service innovation process and social, knowledge

and structural capital in the context of small service organisations in the UK. Finally, similarities and differences between social, knowledge and structural capital have been discussed and illustrated. The next chapter presents the research methodology applied in the study.

## **Chapter 3 – Research Methodology**

## **3.1 Introduction**

Chapter 3 explains the design of the research, which stresses the philosophical position of the study and the subsequent steps that were used throughout the research process. The configuration of the chapter is as follows:

- Ontological, epistemological and axiological assumptions are discussed to establish the philosophical paradigm of the study
- A discussion underlines the process of recognising the research problem and presenting the consequent aim of the research
- The rationale for the type and approach to research is underlined
- A rationale for the choice of methodology and strategy of the research is presented
- The selected data collection methods and data analysis techniques are highlighted
- Finally, a discussion on the constructs of validity and reliability (both internal and external) in relation to the research concludes the chapter

## 3.2 Research Design

The need to define an appropriate research process is relevant for it entails the complete design of the study. Saunders et al. (2015) use the concept of the research onion to metaphorically describe the layers of the research process. Similarly, Van de Ven (2007) offers a framework that underlines the thinking process and decisions to be made throughout the research journey. The researcher referred to both frameworks to guide and help identify and develop the overall structure of the research, thus aiming to design a solid and coherent process.

## **3.3 Research Philosophies**

In any study it is relevant to acknowledge the underlying philosophical characteristics of the situation that is being considered in addition to the techniques used. Acknowledging these two facets helped the researcher to better understand the study since they influence the research framework and strategy (Saunders and Lewis, 2012; Easterby-Smith, 2012).

### 3.3.1 Ontology, Epistemology and Axiology

Creswell (2007) highlights four basic assumptions that help to define the philosophical stance of the research:

- Ontological (ways we construct reality)
- Epistemological (different knowledge that forms that reality)
- Axiological, (inductive logic, within its context)
- Methodology (what tools can we use to know that reality)

Ontology focuses on our interpretation of the nature of reality, and the question of whether nature is distinct from practices and understanding (Braun and Clarke, 2013). Ontological assumptions rest on a spectrum of paradigms that range from realism, where reality is viewed as a natural law that is separate from the human mind, to relativism, where reality is viewed as dependent on human minds and interactions (Guba and Lincoln, 1994). Located in between is critical realism, which acknowledges a real and identifiable world as well as subjective and human based knowledge. Critical realism recognises the existence of an independent reality that can be accessed to generate new knowledge (Braun and Clarke, 2013). Ontological assumptions are the major differentiator between qualitative and quantitative research and the starting point of the research from which the epistemological and axiological assumptions logically flow.

Epistemology focuses on the nature of knowledge and what makes valid and acceptable knowledge. Easterby-Smith et al. (2012, p.17) refer to epistemology as the "best ways of enquiring into the nature of the world". Epistemological assumptions can relate to the paradigm of realism or relativism with their respective contrasting positions, namely that truth is whole and can be gained with the use of compelling knowledge production, or that truth cannot be complete for knowledge is relative to its context. These positions can also be distinguished with the question of whether reality is discovered or created through the process of research (Braun and Clarke, 2013). Epistemological assumptions are underpinned by different worldviews

that include positivism and post-positivism, constructivism, contextualism and pragmatism (Babbie, 2007; Creswell, 2007; Braun and Clarke, 2013).

Based on the original view of Comte that society could be studied scientifically, positivism argues the existence of a separate world where truth can be measured with the use of objective methods (Babbie, 2007). At a later stage, the influence of contexts and researchers on research was recognised and combined in a post-positivism paradigm. Nonetheless, the focus of post positivism rests on the belief of limited subjectivity in the production of knowledge (Creswell, 2007). Creswell and Poth (2017) add that, whilst positivism emphasises the notion of cause and effect, postpostivism introduces the idea of the probability of cause and effect. Opposite to positivism is constructivism, also known as interpretivism, which argues that reality is not objective and that subjective knowledge is gathered through the understanding of the personalities and social realities of participants (Easterby-Smith et al., 2002). Finally, pragmatism is described as a view that is not underpinned by philosophical principles and where the main focus is on the aim and objectives of the research, which are believed to drive the choice of research methodologies.

Other paradigms have been identified that operate at a more theoretical level than philosophical, such as postmodern perspectives, feminist theories and critical theory (Creswell, 2007). Creswell mentions that these transformative frameworks that provide a theoretical orientation are based on the shared interpretations and beliefs of communities. These draw attention to groups that are marginalised and underrepresented, which are not acknowledged in post-positivism and constructivism. Postmodernism sees knowledge as part of the current world and throughout multiple aspects of society it adopts an ontological relativist position that reality is socially constructed. Postmodernism does not support the positivist notion that truth is measured scientifically with objective methods. Feminist theories, which focus on the questioning of inequalities between men and women, encompass different strands of feminism thinking (Jackson and Jones, 1998) and can adopt positivistic, pragmatic or post-modernistic stances. Critical theory relates to the relationships and the patterns of dominance that can restrain changes in social systems. Reality in critical theory is explained within the political, cultural, historical

and economic contexts of society, and the interaction between researchers and participants in developing knowledge is stressed.

Axiological assumptions focus on the value and ethics of research, and relate to the question of 'what is the role of values?' The positivist view emphasises objective research and therefore considers research that is value-free and more specifically fixed on data and rigour. In contrast, the constructionism position considers research that is value-laden and where biases are present due to the values held by researchers that impact the nature of the information collected (Cresswell and Poth, 2017). Figure 3.1 illustrates the range of philosophical assumptions and paradigms in research.



Figure 3-1 Philosophical assumptions and paradigm in research (Source: Author)

#### 3.3.2 The Philosophical Approach of the Study

This study adopted a relativist ontological approach since the researcher does not see reality as separate from humans. This position comes as the result of a shift over several years from an objective view of reality to one that recognises participation from interaction in an increasingly complex world. This change has been, and is still being, experienced through the understanding and interest gained in viewing organisations as social and living systems where humans are acknowledged as having a role in organisational change (Johannessen, 1998; Capra 2003; Wheatley, 2006). This representation of reality as a social construct needs to consider the part, value and characteristics of people in research. This consideration has been neglected, particularly with regard to social relationships, on the basis that outcomes have traditionally been considered inherent to relational systems; this has resulted in a stronger focus amongst studies on static social structures (Kilduff and Tsai, 2012).

With regard to the epistemology, the researcher adopted a constructivist position based on the argument that social sciences should rely on values and study practices that are different to natural sciences (Bryman and Bell, 2011), and that organisational studies require a different reasoning. Based on Guba and Lincoln's (1994) idea to reduce the distance between researchers and participants, the researcher believes that a closer interaction with participants in their context is relevant in developing a better understanding of their experiences. This view contrasts with the more positivist approach in which knowledge is unrelated to context (Bensimon et al., 2004). In the study, the constructivist position was supported by each organisation being seen as operating in a unique and evolving environment, which meant that each had a different meaning and interpretation of innovation and innovation process, inter-organisational relationships, their knowledge, and systems and practices. Furthermore, participants, in their natural context, were regarded as primary means of data collection to gather these interpretations. This was in agreement with Guba and Lincoln (1994), who claim that in a constructivist stance only individuals can communicate multiple formed experiences. The axiological assumptions of the researcher were not in agreement with Van de Ven (2007) who claims that all research in the social sciences is

135

unbiased and value free, as such research is linked to its researcher, user and research sponsor.

The social science approach has traditionally been positivist (Churchill and Lewis, 1986, cited in Shaw, 1999; Kilduff and Tsai, 2012); however, the researcher supports the argument of Shaw (1999) who states that this has not provided enough in-depth data, and, with regard to social relationships, it has largely exposed their structural, as opposed to their relational, dimensions. This motivated the researcher to undertake an in-depth investigation of the chosen topic. However, the study did not seek to challenge positivism as the researcher recognised that the notion of context is considered in post positivism and that some of the characteristics of small digital marketing agencies have been formed from objective knowledge. Figure 3.2 illustrates the philosophical approach of the study.





## 3.4 Topic selection and purpose

Van de Ven (2007) stresses that the selection of a topic and the specific problem within it is a key consideration in developing a study as it influences the choice of research method. DePoy and Gitlin (2015) outline six sources that help in the identification of a topic, and these are:

- Professional experience,
- Societal trends,
- Professional trends,
- Published research,
- Existing theory,
- Other sources.

Different sources were used in the topic selection of this study. The professional experience of the researcher in small business services was an important source. In this context, the questioning of the need for intentional innovation as well as the contemptuous attitude towards innovation and systemic capitalisation of sources were the subject of recurring professional discussions and patterns. The trend of the increased economic relevance of the service industry and the recognition for collaborative relationships between organisations, which was reflected at the level of government policy, was also relevant to the selection. Furthermore, professional trends identified through industry publications informed the topic selection by making apparent the necessity and requirements for innovation and inter-organisational relationships in services, particularly in growing digital industries, such as digital marketing. As well as enabling the focus and refinement of the topic, this insight helped to further define the scope of the research.

To progress from the identification of a research topic to a research issue, the researcher followed some suggestions made by DePoy and Gitlin (2015) that entailed thinking about the purpose of the study. They highlight three types of purpose:

- Professional
- Personal
- Theoretical and methodological

The professional purpose of the study was to inform small business services on their innovation activities to potentially enhance their innovation practices. The unclear picture in small digital marketing agencies with regard to their innovation and use of social relationships strengthened the research purpose to ensure that it could be beneficial to the digital marketing industry. At a personal level, the purpose rested on a genuine and increasing interest by the researcher in the potential of innovation and social relationships between organisations. The marketing background of the researcher was another motivator to conduct research in the context of digital marketing.

The methodological purpose of the research is reviewed throughout the research methodology section of Chapter 3. However, the theoretical purpose emerged from the literature review.

The review presented in Chapter 2 was carried out during the early stage of the study and helped to identify the theoretical gap as well as the empirical and methodological needs, which shaped the rationale for the research. The first theme reviewed was innovation followed by social capital, knowledge and structural capital. The emphasis of the literature on product innovation strengthened the decision of the researcher to concentrate on the area of service innovation. As the review progressed, the theme of innovation process in services was further emphasised. The discussion concerning the effect of the task environment on the service innovation process enabled the review to proceed to the theme of social capital. A multidimensional theoretical framework helped in the identification and further discussion of the structural and relational dimensions of social capital. Subsequently, the theme of knowledge was reviewed from the perspectives of social capital resource and internal organisational resource, which are influential to the service innovation process. The discussion particularly focused on the properties of knowledge. Finally, the supportive construct of structural capital to social and knowledge capital and its influence on the service innovation process led to the review of this theme. Whilst the lack of studies on structural capital provided limited literature, the review and discussion focused on the specification of tangible and intangible forms of structural capital. The researcher sought to review the most relevant and current quantitative and qualitative studies in organisational studies and occasionally in other academic fields. An illustration of the main themes covered in the review of the literature is presented in Figure 3.3.



Figure 3-3 Main themes of the literature review (Source: Author)

The review of previous studies on innovation and innovation process and interorganisational relationships helped to refine the focus of the research and frame the research issue; furthermore, it also influenced the design of the research process. The literature on innovation stressed the on-going discussion on the need to consider innovation from an integrative perspective, which recognises that service innovation contributes to innovation theories and that its characteristics must be acknowledged in theoretical innovation frameworks. This influenced the underlying purpose of the study, which was to contribute to the integrative theoretical approach in innovation. The literature further underlined the limited focus of service innovation studies on innovation process, as opposed to innovation outcomes; this helped to set the focus on the innovation process. Studies on innovation processes were mostly identified in the context of manufacturing and large professional service organisations with standardised services. This stressed that further attention was needed on smaller service organisations.

Seminal models of the innovation process did not reflect the characteristics of the services, nor emphasised the external environment of organisations. However, the literature acknowledged the influence of social relationships on the innovation process in services. Social capital was also presented as an appropriate approach to investigate inter-organisational relationships. The literature underlined the increasing demand to regard social capital as multi-dimensional, which meant taking its relational component into account as well as its structural component. This demand was based on the findings that social capital studies tended to hold a positivist view and consequently emphasised the structure over the subjective quality of relationships.

The literature underlined the importance of taking knowledge into consideration on the basis that it is an embedded resource of social capital and a resource internal to organisations. Studies on knowledge and innovation were predominantly quantitative, measuring the values of knowledge on innovation process and of innovation performances in the context of networks and alliances. Furthermore, the literature reflected the extensive attention given to the creation, transfer and adoption of knowledge and the lack of investigation into the properties of knowledge.

Structural capital was also highlighted as an important consideration given that it was recognised as a supportive structure to knowledge and social capital. The implications of structural capital for the innovation process was highlighted in a few quantitative studies carried out in manufacturing contexts. However, despite being viewed as an organisational asset, the literature was limited in terms of structural capital, which tended to be considered a component of intellectual capital. The obvious lack of investigation and literature on structural capital emphasised the need for further investigation into that particular asset.

The background to the research and the literature review highlighted an indistinct picture of small service organisations with regard to the innovation process. The imperative of small digital marketing agencies to innovate with limited resources and at a time where the focus of organisations is on value and intangible capital, suggested a lack of understanding of the influence of the intangible resources of social, knowledge and structural capital on the service innovation process. The theoretical purpose of this study was to link the concepts of the service innovation process and social, knowledge and structural capital.

Having taken into account the different purposes for carrying out the study, the aim of the research was to understand and gain insight on the innovation process in small digital marketing agencies in light of social, knowledge and structural capital. This aim was divided into several objectives:

- a) To identify the nature of the innovation process in small digital marketing agencies in the UK
- b) To identify the characteristics of social, knowledge and structural capital in small digital marketing agencies in the UK
- c) To examine the implications of social, knowledge and structural capital for the innovation process in small digital marketing agencies in the UK
- d) To evaluate how small digital marketing agencies in the UK can use social, knowledge and structural capital to enhance their innovation process

# **3.5 The Research Approach**

The different approaches to theory development represent the second layer of Saunders and Lewis' (2012) research process and relate to the role of theory in research and the link between theory and research.

### 3.5.1 Approach to Research

Theory helps to frame how research questions are asked and answered; moreover, data that is not rooted in theory cannot contribute to any further understanding of human experiences (De Poy and Gitlin, 2015). Saunders et al. (2015) list three types of reasoning that can be adopted when designing research:

• Inductive

- Deductive
- Abductive

There are three activities with regard to the building of theory that require different types of reasoning: conceiving or creating a theory; constructing or elaborating the theory; and justifying or evaluating a theory (Van de Ven, 2007). Inductive reasoning is used to evaluate a theory, deductive reasoning to construct a theory, and abductive reasoning to conceive a theory.

Deductive reasoning is the traditional method used in natural science (Babbie, 2007), which starts with broader statements and moves to specific and logical conclusions (Saunders and Lewis, 2012). The purpose of the research is the testing of theory, which implies the abstract becoming visible, measurable and predictable (De Poy and Gitlin, 2015). The conclusion arises logically from hypotheses and is recognised as valid when hypotheses are found to be valid (Saunders et al., 2015). Hypotheses are therefore formulated from theory before data is collected. Blaikie (2010) claims that a deductive approach evolves through six consecutive stages:

1. The suggestion of potential hypotheses aimed at forming a theory

2. The use of a literature review to determine a number of propositions that can be tested

- 3. The examination of hypotheses against existing theories
- 4. The testing of hypotheses through the data collection to measure and analyse the concepts or variables

5. The rejection or modification of theory if testing fails with inconsistent results6. The corroboration of theory if the results of the analysis are consistent withthe hypotheses

Inductive reasoning uses a 'bottom up' approach as it moves from specific observations to pattern identification, which leads to broader generalisations. Although these patterns do not automatically explain the reason for their existence (Babbie, 2007), observation and the identification of patterns help to formulate hypotheses, which can later be tested and developed into general conclusions and

theories. The nature of inductive reasoning is more exploratory and is based on understanding the context in which the research takes place. This enables general conclusions to be drawn and the development of an understanding of the meaning that humans attach to their actions (Saunders et al., 2015). This approach is located within the constructivist view that knowledge derives from understanding humans and their social realities.

Abductive reasoning starts with a surprising observation that is regarded as a conclusive statement on which hypotheses are developed to explain that statement. Hypotheses consequently found to be true lead to a supposition that is also true. This entails identifying the most likely hypothetical explanations for that statement. Abduction requires inductive and deductive reasoning based on a theory that is tested through the observed statement, which is deductively identified (Van de Ven, 2007; Saunders et al., 2015). Table 3.1 compares deductive, inductive and abductive reasoning in research.

	Deduction	Induction	Abduction
Logic	When propositions are true the conclusion must also be true	Known proposition generate untested conclusions	Known propositions generate testable conclusions
Generalisability	From the general to the specific	From the specific to the general	From the interactions between the specific and general
Use of data	Data collection is used to evaluate a hypothesis related to existing theories	Data collection is used to explore a phenomenon, identify themes and patterns and create a conceptual framework	Data collection is used to explore a phenomenon, identify themes and patterns, locate these in a conceptual framework and test this through subsequent data collection

Theory	Theory falsification or	Theory generation	Theory generation or
	verification	and building	modification;
			incorporation of
			existing theory where
			appropriate to build
			new theory or modify
			existing theory

Table 3-1 Deductive and inductive reasoning in research (Adapted from Saunders et al., 2015)

The characteristics outlined in Table 3.1 helped to highlight that the approach of the study was inductive. The research did not start with a defined theoretical framework for testing, as it sought to identify patterns and develop a conceptual framework that provided a better understanding of the innovation process taking into account the social, knowledge and structural capital in small digital marketing agencies. Furthermore, the study sought to contribute to theory generation from an integrative perspective, which was highlighted as lacking within existing literature, and noted in the literature review.

Babbie (2007) claims that, whilst all three reasoning are valid and valuable to understanding, researchers tend to feel more comfortable with one particular approach. This claim was reflected in this study since inductive reasoning was found to be more concordant with the constructivist view of the researcher concerning the need to understand how small digital marketing agencies innovated and interrelated. This required an understanding of the meaning behind their actions and routines. Moreover, the researcher believed that insights generated through an inductive approach would better answer the research questions. However, the study acknowledged a limited deductive influence generated by the review and discussion of theoretical frameworks in the literature review, which, whilst not used to test theory, provided guidance for the collection of data.

### 3.5.2 Research Type

This section makes reference to the type of research applicable to this study based on its purpose. Three different types of study can be carried out according to the purpose of the research (Babbie, 2007). These purposes are exploratory, descriptive
and explanatory. Exploratory research is useful to understand and clarify, or to gain insight into a particular problem (Saunders et al., 2015). Traditionally, exploratory studies have been acknowledged as a preamble to larger studies. For instance, Babbie (2007) sees their main purpose as developing methods for future studies or testing the possibility of future and more extensive studies. Nonetheless, he also refers to the purpose of exploratory studies as satisfying curiosity and gaining a better understanding of an issue. Meanwhile, Lamont and White (2008) provide a more robust and considered purpose for exploratory studies as research that aims to uncover themes and patterns as well as what is common and unique, and to develop initial models that reflect the complexity of systems.

In contrast, descriptive research is more suited to describing particular situations or issues and finding precise insights into a problem that is better known beforehand. Because of its descriptive nature, there is often the risk that the research does not reach a deep conclusion, which can thus require further explanatory research to help determine additional elucidation (Saunders et al., 2000). These types, also referred to as conclusive research, are often combined depending on the focus of the study, and stand between the extreme of complete description and the pure measurement of variables (Wilson, 2006).

The main focus of this study was to gain further understanding of the service innovation process in light of social, knowledge and structural capital by determining their nature and characteristics, and implication for the innovation process; therefore, the type of this study was exploratory. In addition to its consistency with the inductive approach of generating insights in a limited researched area, the intention was to discover new information and further understanding that could inform future research on the topics of service innovation process; this is characteristic of exploratory research (Saunders and Lewis, 2012). The contribution of empirical information to the service innovation process is especially important if knowledge on service innovation has to be broadened (Churchill and Lewis, 1986, cited in Shaw, 1999; Howells, 2010). Moreover, the 'how' and 'what' questions of the study emphasised its exploratory nature for both are characteristic of exploratory research (Saunders et

al., 2015). A summary of the research process at this point in the design is provided below.



Figure 3-4 Philosophical assumptions and research approach (Source: Author)

### 3.5.3 Methodological Choices

Saunders et al. (2015) highlight that the first choices with regard to the research methodology relate to whether the design adopts a quantitative, qualitative or mixed method approach. The different methodological choices are presented in Figure 5.

### 3.5.3.1 Quantitative, Qualitative and Mixed Methods

One fundamental difference between quantitative and qualitative methods is that the former refers to numeric data (numbers) and the latter to non-numeric data (words, images) (Saunders et al., 2015). A quantitative approach is located within a positivist paradigm and is most often based on deductive reasoning where data is collected in order to test theory; however, inductive reasoning, where data is collected to develop theory, can also be used. The aims are to measure relationships between variables and emphasise the relevance of the validity of data. Saunders et al (2015) differentiate between the 'mono method quantitative study', where one particular technique, such as a questionnaire, is used to collect data with a compatible analytical process, and the 'multi-method quantitative study', where several techniques are used, such as questionnaires and structured observations, to collect data with a compatible analytical process. In this case, two methods are used but remain separate.

Contrastingly, a qualitative approach lies on a constructivist philosophy, which acknowledges the actions and behaviours of social actors in constructing social reality (Shaw, 1997). Contrary to the quantitative aim of theory testing, qualitative research seeks to develop conceptual frameworks and to contribute to theory by understanding the meanings of individuals on a particular issue (Braun and Clarke, 2013). One fundamental characteristic of the approach is the exploration of issues in natural environments and research contexts that are sensitive to individuals which thus enables the establishment of rapport that helps to gain further meaning and indepth understanding (Creswell, 2007; Saunders et al., 2015). Similar to quantitative research, gualitative can apply to positivist philosophies. Saunders et al. (2015) differentiate between the 'mono method qualitative study', where one particular technique, such as semi-structured interviews is used to collect data with a compatible analytical process, and 'multi-method qualitative data', where several qualitative data collection techniques, such as in-depth interviews and diary accounts, can be used with a compatible analytical process. The differences between quantitative and qualitative research approaches are presented in Table 3.2.

Point of Comparison	Quantitative	Qualitative
Ontological assumptions	Realism	Relativism
Epistemology assumptions	Positivism	Constructionism
Research approach Purpose of investigation	Deductive Theory testing Prediction,	Inductive Theory generation Understanding, make meaning
	confirmation	

Table 3-2 Characteristics of quantitative and qualitative approaches (Adapted from Merriam, 2009)

Mixed methods relate to both positivist and constructionist epistemologies and entail the use of quantitative and qualitative techniques and procedures to collect and analyse data (Easterby-Smith et al., 2012). Researchers consider reality as objective with the view that understandings and interpretations of that reality are shaped by particular social conditionings (Saunders et al., 2015). The mixed methods approach can apply a deductive, inductive or abductive reasoning in that a theory can be tested and then further developed or modified. Saunders et al., (2015) highlight the different combinations of quantitative and qualitative approaches available in research designs, and these are:

- · Concurrent: Qualitative and quantitative methods are used concurrently
- Sequential exploratory: Qualitative methods are used previous to quantitative methods
- Sequential explanatory: Quantitative methods are used previous to qualitative methods
- Sequential multi-phase: Qualitative methods are used previous and after quantitative methods



Figure 3-5 Methodological choices (Source: Saunders et al., 2015, p. 167)

## **3.5.3.2** Methodological Choices for the Study

The comparison between quantitative and qualitative approaches provided evidence that qualitative research was most appropriate to the study. This was based on the identification of the researcher with the relativist ontological and constructivist epistemological positions within a qualitative approach. The inductive reasoning of the study in generating theory on, service innovation process and understanding the meaning of small digital marketing agencies with regard to their innovation process and intangible capital in their context, concurred with its exploratory nature. These are both characteristics of a qualitative approach (Creswell, 2007; Merriam, 2009). The 'inductive' and 'exploratory' nature of the study has been previously discussed in this chapter. Moreover, its aim to gain a deeper understanding of the innovation process and social, knowledge and structural capital providing a comprehensive picture was suited to a qualitative approach (Braun and Clarke, 2013). The strategy of mixed methods was not appropriate as it was not concurrent with the purpose of the study and consequent research questions. Furthermore, it implied that philosophical paradigms do not overlap and can only be contrasted (Easterby-Smith et al., 2012) which diverged from the opinion of the researcher that research designs do not automatically represent one extreme position or another.

With reference to the illustration of Saunders et al. (2015) concerning methodological choices (Figure 3.5), the study adopted a multi-method qualitative approach. Following the recommendation of Saunders and Lewis (2012), the choice of multiple methodologies was based on the objective of the study to evaluate how small digital marketing agencies could use their social, knowledge and structural capital to enhance their innovation process and to provide consequent recommendations. This drew attention to the need for an additional method that could also remain within the same paradigm. This approach was considered useful to answer the related research question by bringing different data and perspectives (Levy and Kellstadt, 2012).

Furthermore, it was acknowledged that the use of a multi-method study has been encouraged in business and management research to help overcome weaknesses when using a single method, such as bias, and to enable a stronger approach to data collection, analysis and interpretation (Bryman and Bell 2011; Saunders et al., 2015). The possibility of data triangulation offered by a multi-method qualitative approach (Quinn Patton, 2002) was also considered appropriate. However, the researcher also considered Quinn Patton's (2002) interpretation that triangulation is not about ensuring automatic data replication to verify the data but bringing further consistency to the research by deepening the understanding of the studied issue.

## 3.5.4 Research Strategies

A research strategy relates to how the research is conducted with the choice and use of available research methodologies. Saunders and Lewis (2012) stress that the choice of research strategies is grounded on the philosophical position of the researcher, the research questions and objectives of the study, the level of accessible knowledge on the subject studied, and the amount of time and resources available. Easterby-Smith et al. (2012) present different research strategies based on a spectrum of positions on epistemological assumptions, and these are presented in Figure 3.6.



Figure 3-6 Epistemology and research style (Source: Easterby-Smith et al., 2012, p.39)

Based on the argument that research designs rarely adopt an extreme position Easterby-Smith et al. (2012) draw attention to the quadrants A, B, C, D, in which they assign respective methodologies.

- Quadrants A and D encompass positivist designs that include methodologies such as experimental designs, quasi experimental designs, and survey design research
- Quadrants B and C encompass constructionist designs that include methodologies such as action research and co-operative enquiry, ethnography, and narrative methods

With the positivist assumption of a separate world where truth can be measured objectively, positivist research often uses deductive reasoning where hypotheses are applied or developed. Experimental and quasi-experimental designs have been identified as appropriate to validate or oppose hypotheses. Particularly used in natural science and medical research, they are key methods to investigate causal relationships (Babbie, 2007). Survey research is also recognised as a positivist based methodology that can be used for descriptive, exploratory and explanatory purposes, although it is most often used for descriptive study (Saris and Gallhofer, 2007). Babbie (2007) describes surveys as the most appropriate method to gather original data for the description of a population that is too wide and that cannot be observed completely. Although these are separate methods, they are known to overlap; for instance, Saris and Gallhofer (2007) explains that experiments can be carried out using survey research with the support of computer assisted data collection.

Constructionist research designs relate to the relativist assumptions that truth is not absolute, that researchers are required to highlight different truths, and that both truth and reality are constructed through human interactions (Easterby-Smith et al., 2012). Action research and co-operative inquiry are methods that emphasise the participation of the researcher in the investigation. In contrast to experimental research that seeks to generalise explanation to all contexts, action research and co-operative inquiry seek to gain understanding to find solutions to a problem with the aim of enhancing effectiveness. These methods are often used in community-based research where a collaborative approach aims to achieve particular objectives in an harmonious and productive way (Stringer, 2007).

Ethnographic research seeks to provide an accurate picture and description from detailed observations of people in their natural and cultural settings, as opposed to providing explanations (Silverman, 2001). Babbie (2007) refers to ethnography through the notion of naturalism, which he states originated from the need for researchers to observe and report social reality. The methodology, which was first used in neighbourhoods and communities in the USA, is now well established in organisational studies and, although nuances apply between work and social life

situations, it requires the researcher to immerse and commit to spending a prolonged period of time in an organisational surrounding (Rosen, 1991).

Narrative methods are considered within the dimension of ethnography (Cresswell, 2007). They draw attention to the concept of narration as a source of knowledge where individuals share their experiences through stories (Elliott, 2005). The focus of the methods is on the narrated story and the way that the story is narrated. As a listener, the researcher is considered a participant in the narration. Elliott (2005) mentions that the use of narrative methodologies is based on the particular interests of the research in finding out about people's experiences with the understanding that experiences occur chronologically. These methodologies are also used when there is an interest in process and change over time, and a desire to empower participants by allowing them to consider the most relevant themes in a particular research area.

Easterby-Smith et al. (2012) also highlighted the methodologies of grounded theory, case methods, and mixed methods, which they believe bridge the positions of constructivism and positivism, and can be used in one perspective or the other.



Figure 3-7 Epistemology and research style (Adapted from Easterby-Smith et al., 2012)

Grounded theory is a method characterised by a lack of preconception about findings and used with the aim to generate or discover a theory (Strauss and Corbin, 1990). The method contrasts with the traditional scientific theoretical positions as it emphasises the grounding of theory in actions, interactions and social processes (Strauss and Corbin, 1990). Grounded theory uses inductive reasoning as theory is generated from the analysis of patterns, themes and common categories of data collected from participants throughout the research process (Babbie, 2007). However, the application of the method by different philosophical perspectives has led to discussions often related to the meaning and procedures of the methodology (Creswell, 2007)

In contrast to ethnography, which seeks to establish how culture operates, a case study aims to understand a particular problem using specific contexts as examples (Creswell, 2007). The methodology that derives from a positivist paradigm can also be applied to relativist and constructionist perspectives. Drawing from Louis Smith, the first educational ethnographer, Salkind (2010) states that, although case study is understood differently by researchers the common agreement is that it involves a detailed inquiry into a bounded entity or unit, which underlines a case study as an object as opposed to a process (Stake, 1995). It is widely used and a useful approach in organisational studies for it allows the exploration of data within its context (Yin, 1994, 2014; Saunders and Lewis, 2012).

### 3.5.4.1 Case Study methodology

The review of methodologies outlined the different strategies available for the study. Based on Saunders and Lewis' (2012) view that the choice of strategy is based on the philosophical position of the researcher, the research questions and objectives of the study, the level of accessible knowledge on the subject studied, and the amount of time and resource available the researcher established that a case study was an appropriate strategy.

Methodologies, such as experimental designs, quasi-experimental designs and survey designs, that are based on the most positivist epistemological viewpoints were not considered appropriate as they did not concur with the position of the researcher and the inductive reasoning of the study. The questions and aim of the research did not concern the measurement of the innovation process with regard to social, knowledge and structural capital, but rather the enhancement of the understanding of the innovation process in light of each element. Similarly, methodologies, such as action research and co-operative enquiry, ethnography, and narrative methods, which had strong constructivist features, were not selected as the researcher was not required to become a change agent within the research context. Moreover, identifying the characteristics of external social capital in agencies through prolonged periods of observation were not seen as viable within the scope and the timeframe of the study. Similarly, the particular use of narrative methodology to develop social histories of identity and development was not considered beneficial to the study (Easterby-Smith et al., 2012). Moreover, grounded theory was not chosen since, despite its basis within inductive reasoning, it does not encourage conducting a review of the literature. This contrasted with the approach of the study where the literature helped to identify the research problem and objectives, provided direct guidance, and influenced the process of data collection.

Instead, a case study was seen as appropriate to answer the research questions, which, based on the objectives of the study, referred to: what is the nature and characteristics of the innovation process, social, knowledge and structural capital, and what are the implications of social, knowledge and structural capital for the innovation process. The methodology suited the descriptive and exploratory nature of the questions, and study, that sought to better understand the issues of service innovation process to generate additional insights on service innovation as opposed to seeking causal explanation. O'Gorman and MacIntosh (2014) have underlined the particular suitability of case study to a 'what' and 'how' type of research questions.

Furthermore, Salkind (2010) mentions that case study is appropriate to studies of exploratory nature, where the aim is to understand complex situations and implications. This was especially applicable to the complex topic of innovation and the aim of the study to understand the service innovation process through the implications of several intangible capitals. The use of case study also offered the possibility of establishing a comprehensive picture of innovation of this complex topic in a real context by exploring the situation in the setting of small digital marketing agencies. This corresponded both with the belief of the researcher that social actors are part of the creation of social entities (Bryman and Bell, 2011), and with the purpose of the study to understand the actions and behaviours of small digital marketing marketing agencies with regard to their innovation process.

154

According to Leana and Pil (2006), real life context is not often seriously taken into account in organisational studies; however, when investigating innovation, it is relevant to acknowledge that the context for innovation is influenced by the organisational context (Baker, 2011). It is also important to pay attention to the settings within which social relationships develop (Kilduff and Tsai, 2012). Considering that social capital resides in this interactive construct, and that its influence depends on the environment where activities take place (Mouw, 2006; Comet, 2009; Kilduff and Tsai, 2012), it was important to underline the case study context to help gain further understanding of the innovation process and social relationships. Furthermore, as the intentions of the study are to use this understanding to further influence innovation practices in small digital marketing agencies, and to contribute to the integrative theory of service innovation through understanding technology-based service organisations, the case study method was considered suitable.

Moreover, the case study methodology offered an option of flexible design that enabled the combination of methodical processes with limited constraints. For instance, a thorough design process was more relevant to the study than an emergent design that is characteristic of radical constructivism (Stake, 1995). Nonetheless, the flexibility in selecting the methods for data collection and analysis (Merriam, 2009) was also found to be relevant. Thus, the justification for the choice of case study as a methodology are summarised in Table 3.3.

The methodology was better suited for the study than other research strategies

The methodology allowed for a wider spectrum of epistemologies other than radical positivism and constructivism.

The wider spectrum of epistemologies provided the option of a flexible design (thorough process and choice of data collection and analytical methods)

The methodology allowed for inductive reasoning, including consultation with existing literature to guide the research process

The methodology was appropriate to the 'what' and 'how' research questions

The methodology provided the opportunity to draw attention to the context of small digital marketing agencies with regard to their social relationships

The methodology was suited to exploratory research, and aimed at developing the understanding of complex situations and their implications in order to influence further research and practices; this was applicable to the study.

Table 3-3 Justifications for the selected case study methodology (Source: Author)

### 3.5.4.2 Expert Interview Methodology

Whilst an expert interview is most frequently considered as a data collection technique, Bogner et al. (2009) stress that this terms refers instead to a particular methodological approach that is related to the research design and purpose and suited to the specific characteristics of expert knowledge. Based on this argument, the use of expert interviews as a research method was considered for this study. Furthermore, Lewis and Saunders' (2012) claim was also considered, that several methodologies can be combined at different stages of the same study based on their suitability to answer research questions and objectives. The question of the study, 'How can social, knowledge and structural capital enhance the innovation process in small digital marketing agencies in the UK?' and the research objective to provide recommendations to enhance innovation process in small digital marketing agencies in the UK implied the use of a methodology that was external to the context of agencies and therefore an additional method was considered alongside the case study. Indeed, it was considered that data collected from case study would not result sufficient to answer the research question. However, experts were considered as a suitable methodology to provide valuable perspectives on the question, based on their knowledge and experiences.

Bogner et al. (2009) highlighted three types of expert interview:

• Exploratory

- Systematising
- Theory-generating

An exploratory expert interview seeks to enhance the awareness of the researcher about a field that is new or less developed. The aim is not to compare data or gain a maximum of information, but to gain a clearer idea of the studied problem or to initially identify an insight for the development of an interview guide. An exploratory interview can apply a quantitative or qualitative approach, and is viewed as effective in providing structure to the subject and enable the generation of hypotheses. Experts tend to be regarded as a complementary source of information through their ability to offer contextual knowledge; moreover, in some cases, they can refer to the actual group to which the study is targeted.

A systematising expert interview is the most common type of expert interview and related to an exploratory variant in that it seeks access to exclusive knowledge held by experts that originates from their actions and experiences. The aim is to gain systematic and complete information. Experts are thought to possess some grounded knowledge related to the research question that the researcher does not have. This type would be appropriate for a methodology that emphasises the data provided over the individual expert; therefore, it is relevant for the data to be related to the subject of the study. Similar to the exploratory interview, the systematising interview can apply a quantitative or qualitative approach.

With regard to the theory-generating interviews, experts are not acknowledged as the channel that provides effective information. The focus is on the tacit knowledge that they have acquired through their experiences, which is used as the basis to develop a theoretical concept, often through the generalisation of a typology. The researcher commonly uses theoretical sampling and comparative analysis as the process of inductive theory formulation. With regard to this study, the systematising expert interview was applied, as the purpose was to gain complete information to address the research question, on which the researcher did not possess the required information. This type was also suited to the qualitative approach of the study (Bogner et al., 2009).

The identification of the types of expert interview requires clarification of the meaning of 'expert'. Although Bogner et al. (2009) believe that defining expert by focusing on the knowledge dimension of expertise, this is unconvincing as it leads to contradiction. They highlight three different ways in which the term expert can be explained:

- Voluntaristic
- Constructivist
- Sociology of knowledge

The voluntaristic approach considers that everyone is an expert based on belief that everyone is experienced and holds information. The constructivist view underlines the method-relationship approach where experts are considered to have appropriate knowledge of the topic, based on the interest of the researcher. This approach requires experts to be public leading individuals since expertise is not viewed as a personal quality or capacity. The constructivist view also underlines the social representational approach where an expert is acknowledged as anyone that is recognised as such by society. Finally, the third approach of the sociology of knowledge conceptualises experts in terms of the structure of knowledge; this implies that expert knowledge is complex and aligned with a profession, as opposed to general knowledge.

Based on the definition of expert from Bogner et al. (2009), the researcher identified with the constructivist method-relationship approach in viewing experts as individuals with an appropriate knowledge of digital marketing. This knowledge has developed from practice, interest and experience, rather than merely through being public figures. This meant that the requirement to be a published author or to hold a prestigious position was not necessary.

Bogner et al. (2009) further identify three main aspects of expert knowledge

- Technical knowledge
- Process knowledge

## • Interpretative knowledge

Technical knowledge is identified as the awareness of a specialised area that does not relate to everyday knowledge. Process knowledge relates to the awareness of specific routines or processes derived from close or direct practical experiences and involvement in an activity. Interpretative knowledge refers to the opinions, interpretation and ideas of experts on which the interview is focused. The researcher sought process and interpretative knowledge from the expert interviews, as this encompassed knowledge from practical experience and involvement in digital and digital marketing activities, as well as opinions, interpretation and ideas that would help in the evaluation and recommendations of the study.

## 3.4.5 The Unit of Analysis and Time Horizon

The unit of analysis and time horizon are two relevant areas where decisions need to be made during the design of the research. Whilst the unit of analysis provides a boundary to the research questions and collected data (O'Gorman and MacIntosh, 2014) the options related to time strengthen the focus of the research on whether seeking to provide a comparative snapshot or some causal effects through the observation of changes and development (Babbie, 2007).

## 3.5.5.1 Unit of Analysis

It is important to identify the unit of analysis in advance when applying a case study methodology since it influences the design of case study and the choice of single or multiple cases. Furthermore, it provides guidance on the analysis (Easterby-Smith et al, 2012). The unit of analysis can be explained as the 'what' and 'whom' of a study (Babbie, 2007). Alternatively, it can be understood as the unit of observation. According to Quinn Patton (2002), units of analysis can be focused on people, geography, activity, structure, worldviews and time. People-focused units, for instance, encompass individuals, families or small informal groups, whilst structured focused units include projects, programmes, organisations and organisational departments. Therefore, individuals can be used as a unit in research on job satisfaction; meanwhile, the unit of 'organisations' might relate to studies on organisational performances. Van de Ven (2007) stresses the importance of research aims, objectives and questions when deciding on the unit of analysis for they determine the subject or person that is observed, described and analysed. On this basis, observation and analysis was required at an organisational rather than at an individual psychological level (Yin, 1994) as the aim of the study was to understand the innovation process with reference to small digital marketing agencies. Therefore, the unit of analysis was identified as the small digital marketing agency, and characterised in terms of the number of employees, which was up to thirty-nine.

## 3.5.5.2 The Time Horizon

According to Babbie (2007), observations can be carried out at one time or over a long period of time; this results in the following two options for the study:

- Cross-sectional studies
- Longitudinal studies

Cross-sectional studies seek to provide a snapshot of a current phenomenon at a particular time (Babbie, 2007). Cross-sectional designs are traditionally acknowledged as useful with a quantitative approach where survey methods and questionnaire techniques are used to collect data (Saunders and Lewis, 2012). This is because they allow for the description of a large number of organisations or people (Easterby-Smith et al., 2012). However, they have also been considered suitable for qualitative studies when using multi-methods or multi-techniques of data collection, and for exploratory types of research for they allow for an in-depth exploration of a specific issue (Saunders and Lewis, 2012).

In contrast, longitudinal studies seek to observe a phenomenon over a longer period of time. Longitudinal designs are particularly suited to studies aimed at understanding changes over time as well as explanatory research that intends to explain causal effects (Babbie, 2007). Although suited to the positivist paradigm, these are not appropriate to large surveys and are traditionally associated with a constructivist viewpoint where recurring contacts are made with participants in their settings over an extended period to observe the evolution of a particular phenomenon (Easterby-Smith et al., 2012).

The explorative nature of the study favoured a design that allowed for an in-depth exploration of small agencies with regard to their innovation practices, their social relationships, their knowledge, and their use of systems and processes. If the aim of the study was to investigate the evolution of the process used to innovate, or the changing implications of social, knowledge and structural capital on their innovation process, an extended period of investigation would have been beneficial. However, based on the above argument, the study adopted a cross sectional design. A summary of the research approach at this point in the research design process is provided in Figure 3.8.



#### Figure 3-8 Summary of the research process followed by the study (Source: Author)

### 3.5.6 Case study design

#### 3.5.6.1 Single Versus Multiple Cases

A case study is the object that is being studied, and not the choice of methods and techniques (Stake, 1995). Yin (2014) distinguishes a case study according to the size of the case and draws attention to the notion of single and multiple case studies. The number of cases undertaken is one basic and defining factor in case study design, which, in the same context, can lead to four different types of design, as shown in Figure 3.9.



Figure 3-9 Basic types of design for a case study (Adapted from Yin, 2014, p.50)

A single case emphasises the study of one particular unit. There are five rationales for single case design, which requires the selection of a critical, unusual, common, revelatory, or longitudinal case (Yin, 2014). The intent of the critical case is to confirm or to build on previous theory. The unusual case is used to research an event that differs from standard theories or everyday events, and thus stands in contrast to the common case, which focuses on everyday occurrences. The revelatory case aims to research events that have not previously been accessible, while the longitudinal case aims to study a phenomenon over time. In comparison, multiple case studies emphasise the study of several units with the aim of understanding their differences

and similarities (Stake, 1995). Therefore, research findings can be predicted to be similar or contradictive (Yin, 2014).

The unit of analysis further influences the choice between holistic or embedded cases. The identification of multiple sub-units of analysis results in a more complex design for embedded case studies; meanwhile, a holistic approach results from the focus on only one unit of analysis. However, both single and multiple cases can respectively become holistic or embedded cases.

It is acknowledged that a single case lead to a deeper understanding of the studied phenomenon (O'Gorman et al., 2014). In their single case study on the role of interorganisational citizenship behaviours in the innovation process, Gerke et al. (2017) sought to gain a deep understanding for they referred to the level of knowledge on the topic as emerging and drew on Eisenhardt (1991) to justify that one case was required to provide a rich and in-depth exploration, analysis and development of theories that could subsequently be tested. Similarly, Syson and Perks (2004) referred to an early stage understanding in their single case study on service development within a network setting.

Multiple case studies are also valuable as they provide the opportunity for a wider and deeper exploration of the research questions (Eisenhardt, 1991; Miles et al., 2014), and analysis within and across cases; they are therefore regarded as stronger and more grounded in empirical evidences (Miles et al., 2014; O'Gorman et al., 2014). Moreover, studies can be used to contrast or concur findings (Yin, 2014); for example, in the multiple case approach adopted by Robertson (1974) to investigate product innovation process the aim was the comparison between successful and unsuccessful product innovations in two different industries.

Based on Yin's (2014) rationale, a single case of a small digital marketing agency with regard to innovation would not be infrequent nor represent an extreme or unique example. Similarly, the inductive nature of the study meant that a small digital marketing agency would not represent a critical case aimed at testing a proposition in order to develop or confirm a theory. Furthermore, the cross-sectional design of the study did not favour a one case approach, which is better suited to longitudinal

163

designs (O'Gorman et al., 2014). Therefore, a multiple case design was chosen over a single case design. The intention of the researcher was to develop more grounded evidence, which provided an additional reason for this choice. The unit of analysis, previously identified as 'small digital marketing agency' with the subsidiary unit of 'innovation process', meant the application of a multiple embedded case study design. Each case was defined as a small digital marketing agency.

### 3.5.6.2 Case Selection

The small digital marketing agency, identified as the unit of analysis, was defined as the case to be studied. Sampling logic is not applicable to case studies as, contrary to survey studies, they do not require an examination of a representative sample of the whole population to assess the frequency of studied phenomenon (Stake, 1995). Rather, in multiple-case studies, cases are selected on the basis of concept not representation (Miles et al., 2014); for instance, the intention of the study was to highlight the theoretical concepts of innovation and social capital, among others, in connection with the underlying theory. Nevertheless, Yin (1994, 2014) highlights the logic of replication as a strategy for identifying information sources. He distinguishes between literal replication, where cases are selected to validate each other, and theoretical replication, where it is predicted that they will provide contrasting results for expected reasons.

The study reflected the logic of literal replication highlighted by Yin (1994, 2014) in that, by identifying small digital marketing agencies as cases, these were expected to validate each other in terms of innovation practices, as opposed to large and small digital marketing agencies. However, due to its exploratory nature, the selection of cases relied on a criterion strategy (Patton, 1987; Stake, 1995) which required small digital marketing agencies across the UK to have been operating for a least two years to ensure that they had established social relationships with their task environment and implemented internal systems and processes. To ensure that agencies had been recognised for their achievement and innovation they were identified from the award listing of the Recommended Agency Register (RAR) 2015 and 2016, which is the UK agency selection service. Following the RAR classification

small digital marketing agencies were identified as agencies with less than 49 employees.

There are several recommendations to consider with regard to the number of cases. From a constructivist position, Stake (1995) suggests a sample of one case or more with an emphasis on the uniqueness of each case. In comparison, Eisenhardt (1991) suggests four to ten, and highlights that using less than four cases does not allow for the generation of theory and provides a weak empirical basis. Meanwhile, from a positivist position, Yin (2014) recommends a sample of up to thirty cases, whilst Miles et al. (2014) view five as an appropriate number. Miles et al. believe that, depending on the circumstances, ten might become too cumbersome and that twenty to thirty cases is undeniably too many as the data becomes too thin. However, it is understood that an appropriate number of cases is debateable as it is the responsibility of the researcher investigating a specific issue (O'Gorman et al., 2014).

The study sought to provide a solid empirical basis and contribute to theory generation, therefore, similar to the position of Eisenhardt (1981), it allowed for the application of 10 cases. This reflected a relativist position of the researcher on the epistemological spectrum. The choice was also based on the limited scope of the defined case (small digital marketing agency) and on the 'upper echelons' theory of Hambrick and Mason (1984), revised by Carpenter et al. (2004), that considers that top managers inform the strategic decisions that affect organisational performances and outcomes. This meant that a greater emphasis was given to the founder/managing director of agencies in the collection of data. Consequently, a larger number of cases was required to minimise the possibility of omitting important information, which is more likely to happen when using a smaller sample (Malterud et al., 2016). Additionally, as an exploratory multi-case study, a sample of ten cases allowed the researcher to carry out a cross-case analysis (Malterud et al., 2016) as well as within-case analysis. Furthermore, the study acknowledged the concept of case saturation as a guiding principle, and was thus attentive to the fact that new cases were not generating any new contributing information (Strauss and Corbin, 1990). Whilst 10 cases were included, thirteen were conducted on the basis that

each was classified under a different SIC codes despite providing digital marketing services. This meant that each case provided specific contributing information.

Similar multi-case sampling has been used in studies that seek to emphasise and understand more complex phenomenon. In their study carried out in three different industries Schweisfurth and Herstatt. (2016) use up to nine case studies in each based on that the variation due to the different contexts requires additional cases. Similarly, the consideration of the study for small digital marketing agencies classified in several UK SIC codes meant that more cases were studied. Furthermore, in his investigation on innovation in small and medium financial service organisations, Vermeulen (2005) uses twelve cases to gain an in-depth insight into innovation barriers and the development process with regard to complex innovation products. Moreover, Carson et al. (2004) carry out thirteen cases when investigating the use of networks by SMEs to navigate market changes in a particular industry. Their rationale for multiple cases lies on the search for deeper understanding on the complex structure of social relationships (Fombrun, 1982) and to provide a more holistic picture that offers a rich description (Merriam, 2009).

Based on the above arguments and the intention of the study to provide a detailed picture of innovation and its complexity involving social capital, knowledge and structural capital, a multi-case sampling approach was found to be appropriate. Small digital marketing agencies were selected in several of the 22 digital clusters across the UK. Furthermore, on the basis that not all of organisations would agree to take part, 75 agencies were identified in the South West, London, North West and North East clusters. The initial contact and request for participation was made by email followed by one or several telephone calls, and 13 agencies that agreed to take part were selected on the basis that each was classified under a different SIC codes. The agencies that did not wish to take part responded by explaining that either they were unable to participate due to the lack of time and human resources, or that the topic did not apply to their organisation.

### 3.5.7 Expert Interview Sampling

The methodology of the expert interview aimed to gather information from participants that addressed the objectives of the study in order to evaluate how small digital marketing agencies can use their social, knowledge and structural capital to enhance their innovation process. The intention of this study was to provide recommendations to enhance the innovation processes of such agencies, rather than to generalise findings to a larger population. Therefore, the study followed a purposeful sampling approach, which is considered more appropriate for such a study than probability sampling (Cressell, 2009). The researcher used an expert sampling technique, which consisted of targeting and selecting individuals expected to provide rich information that could be analysed (Quinn Patton, 2002).

Criteria were applied during the selection to ensure that potential participants were appropriate and effective sources of information (Braun and Clarke, 2013), and that they had the knowledge required to answer the questions. Whilst these were not required to be leading public figures, their selection was based on their potential to contribute to the knowledge and practice of digital and digital marketing. The researcher identified six experts with knowledge in digital technology and digital marketing agencies, who had participated in past digital and digital marketing conferences and related events. Additionally, three experts from the field of academia with knowledge of digital marketing and digital technology where selected; one of whom responded via a blog posted by the researcher at the university that was aimed at recruiting experts to take part in the research.

Once the process of data collection started, a snowball sampling procedure was used, where an initial participant provided the name of another potential participant. The use of snowball sampling is believed to be useful in reaching experts and is similar to purposive sampling in enabling an in-depth exploration of the topic by helping to provide the necessary knowledge to achieve the objectives of the study (Saunders and Lewis, 2012; Braun and Clarke, 2013) to evaluate and provide recommendations. Five additional experts were contacted using this sampling technique. The size of the sample was believed to be suitable to ensure the appropriate quantity and quality of the data, which would thus help to develop the understanding of the topic and respond to the research questions (Braun and Clarke,

2013). Furthermore, similar to the selection of cases the researcher acknowledged the concept of saturation (Strauss and Corbin, 1990) as a guiding principle giving attention to the fact that additional participants would not generate any new contributing information.

# **3.6 Research Techniques and Procedures**

This section presents the techniques that were used in the research to collect data and to conduct the analysis of the data.

## 3.6.1 Data Collection Techniques

## 3.6.1.1 Interviews

Unlike experimental, survey or historical research, a case study does not have a particular data collection method or data analysis procedure (Merriam, 2009). However, Stake (1995) suggests the use of observation, interview and document review as methods to collect data in qualitative case study research. Whilst there are no right and wrong methods to collect information (Silverman, 2005; Easterby-Smith et al., 2012), the focus of this study, which aimed to collect the experiences and opinions of participants, favoured interview or observation. The difference between interview and observation is that observation takes place in the natural environment that is being researched, where the researcher immediately records information; meanwhile, the in-depth interview focuses on the account of the respondent in a defined place that is suited to the process (Merriam, 2009).

The choice of interview over observation was based on realistic practicalities and some of the limitations associated with observation. Observation allows for closer contact with participants and therefore a better appreciation of what is happening, with the added possibility of uncovering unexpected issues, the method demands a longer research timeframe (Bryman and Bell, 2011). Moreover, in a business related context, observation is most often carried out in one confined and closed place. As the intention of the study to gain a deeper understanding of some of the reasons and motivations behind the actions of participants in relation to their innovation, this would therefore not have been met through observation since access to participants would not have been possible (Bryman and Bell, 2011).

Saunders et al. (2015) highlight three different types of interview, which relate to the research questions, purpose and strategy:

- Structured interviews
- Semi-structured interviews
- Unstructured or in-depth interviews

Structured interviews are questionnaire based and often used in quantitative and descriptive types of research for which questions are standardised and answers precoded in order for responses to be aggregated. Both semi-structured and unstructured interviews are used in qualitative research. Semi-structured interviews are guided by themes and key questions that can vary from one case to another. Although unstructured interviews do not use any guiding themes or questions and participants are able to talk freely about a particular topic, according to Britten et al. (1995) in terms of methodology, no interview is completely free of structure.

The study did not apply structured interviews for it was not considered appropriate to the qualitative approach of the study. Instead, semi-structured interviews were selected, as unstructured interviews are more appropriate when covering one matter in detail that requires little direction (Britten et al., 1995; Saunders and Lewis, 2012). The method was viewed as applicable considering the exploratory purpose of the study for it enables the collection of relevant contextual information and allowed for the probing of participants, which helped to clarify or further understand their meaning with regard to their experiences (Saunders et al., 2015). According to Saunders et al. (2015) this helps in collecting rich and detailed data.

Moreover, the method, which encompasses the characteristics of both structured and unstructured interviews, provided flexibility that allowed for questions to be asked in a different order with the use of an interview guide approach (Patton, 1987). The use of a guide ensured that specific questions about innovation process, social, knowledge and structural capital were raised. Participants were also able to talk openly and flexibly about their experience in their own words without being restricted by a more rigid list of questions (Saunders and Lewis, 2012). Finally, the method was suited to the large number of questions that needed to be covered during the interviews with regard to innovation process, social, knowledge and structural capital (Saunders et al., 2015). Table 3.4 summarises the types of interview considered.

Level of Structure	Type of Interview	Research approach		
Highly structured	Market research interview	Quantitative approach		
Semi-structured	Guided open interview	Qualitative approach		
Unstructured	Ethnography	Qualitative approach		
Table 3.4 Types of interview (Adapted from Easterby Smith et al. 2012)				

Table 3-4 Types of interview (Adapted from Easterby-Smith et al., 2012)

Seventeen semi-structured interviews were conducted within the 13 cases (small digital marketing agencies). This number was suitable as it fell within the range of the fifteen to thirty interviews considered appropriate for qualitative research seeking to identify patterns across data (Braun and Clarke, 2013). Taking into account the upper echelon theory (Hambrick and Mason, 1984; Carpenter et al., 2004) that highlights that top managers inform strategic decisions that affect organisational performance and outcomes, the researcher focused on interviewing the founder and/or managing director in each agency. In agencies where this was not possible a senior manager and a middle manager were instead interviewed to enable cross verification. An overview of the position of each participant is provided in Table 3.5.

Digital Marketing Agency	Size of the agency (number of employees)	Position in the organisation
Agency A	38	Head of Inbound – Director
Agency A	38	Account Manager
Agency B	34	Co-Founder and Creative Director
Agency C	27	Co-Founder and Commercial Director
Agency D	30	Managing Director
Agency D	30	Digital Media Manager
Agency E	20	Co-Founder and Client Services Director
Agency F	1	Founder and Managing Director
Agency G	26	Strategy Director
Agency G	26	First Creative Manager
Agency H	14	Founder and Managing Director

Agency I	30	Founder and CEO
Agency J	16	Managing Director
Agency J	16	Head of System Development
Agency K	18	Co-Founder and Managing Director
Agency L	10	Co-Founder and Managing Director
Agency M	16	Founder and Managing Director

Table 3-5 The role of participants and size of agencies (Case studies)

A four-part interview guide that included the four main themes, concerning innovation process, social, knowledge and structural capital, and the key questions was developed based on the literature review. This ensured that the questions covered all the topics. A pilot interview was conducted with a digital marketing agency that was not a Recommended Agency (RA) and not a targeted case, with the aim of ensuring that questions would be understood. Following this pilot interview, some amendments were made. Each interview lasted between 1 hour and 1.5 hours. In order to enhance the credibility of the study, an information sheet about the study had previously been sent to participants with the key themes and key questions (Saunders et al., 2015).

Each of the four-part interviews started with a brief introduction to the theme about to be explored. Open questions, such as, "Can you tell me about ...", were used to introduce the subject more easily and to avoid bias by not bringing in the interviewee's references (Easterby-Smith et al., 2012). Probing questions, such as "In what way...", were used to refine responses when required and to find additional information. Furthermore, direct questions that used "how" or "what" helped to gather more specific responses. Respondents were first asked about their activity and the sector in which they operated and were subsequently asked more specific questions about their innovation and innovation processes and systems. Ethical issues were considered in several ways. For instance, the researcher ensured that participants' information or quotes would not identify them and their organisation; also, they were asked to complete a consent form, which helped to ensure they were fully informed of the way in which their data would be used, and knew they could withdraw at any stage. Furthermore, the interview guide was designed to avoid any questions that

might have been commercially sensitive. Finally, to create a safe environment interviews were conducted at the respondents' workplace at a time of their choice.

### 3.6.1.2 Document Review

The document review was used as a secondary technique to collect data as it gave opportunities to review some interpretations from the case study interviews, which helped to enhance the reliability of the study (Yin, 2014). Despite presenting particular weaknesses, since documents can be difficult to access and retrieve and can also be biased in terms of their content and selectivity, the method is considered valuable and relevant to case studies in that it offers the possibility of a specific and/or broader content depending on requirements (Yin, 2014). The researcher used the method as another information source; however, in accordance with Yin's guidelines, documents were not considered literal recordings. They were used to add to, validate and enhance the evidence collected from the interview sources. The researcher collected documents from some participants that related to their activity and processes. Furthermore, prior to and following each interview, internet research was conducted to collect information about the agencies in order to better understand their structure, culture, projects, services and clients base, and to confirm and correct data or corroborate any contradictory statements that might have been made during the interview. Due to the large amount of information available on the Internet, the researcher ensured that only the documents significant to the research were kept. Each document and source was referenced, some of these references are mentioned in the writing of the findings.

### 3.6.1.3 Expert Interviews

Thirteen interviews were carried out with experts across the UK. Three experts were from academia within the fields of digital technology, digital businesses and digital marketing and the remaining ten interviewees were from the digital sector and digital marketing industry. Similar to the data collection in the multiple cases, the method of semi-structured interviews was selected. An interview guide was used, which included the key themes of innovation, social, knowledge and structural capital, and the key questions were phrased to match the research question and objectives. Open, closed, probing and direct questions were employed. Experts were asked about innovation as opposed to innovation process since the researcher found that the wider concept allowed further references to be made with regard to process. Ethical issues were also acknowledged as experts were asked to complete a consent form to be returned by email and were guaranteed that names of third parties mentioned during the discussion would not be reported. Anonymity was also guaranteed although two experts asked for their name to be cited if applicable.

Interviews were carried out by telephone, and this decision was based on economic reasons with reference to the limited time and financial resources (Bogner et al., 2009) given that experts were based in different parts of the UK (South of England, Northern Ireland, Northern Scotland, Midlands, North of England). One expert was also abroad for work purposes during the interview. Bogner et al. (2009) state that qualitative telephone interviews with experts are common and suitable when experts are believed to have strong competences and experiences, and occupy a position that enables them to think abstractly and provide thorough explanations. With reference to the experts targeted, the research questions involved, and the argument of Bogner et al. the researcher viewed telephone interviews as an appropriate way to collect data.

Busse (2003, cited in Bogner et al., 2009, p.164) acknowledges that, although the telephone has disadvantages since some of the communication is lost when the interviewer cannot see the interviewee, he views the method appropriate to semistructured interviews since both the use of a guide with open and ended questions and the recording of interview ensure a clear understanding. Moreover, Busse provides some guiding suggestions to strengthen the data collection procedure, which the researcher found useful. These included: the need to take a neutral and supportive stance during the interview and make interventions only when seeking clarification; to consider adhering to forty five minutes to an hour per interview; to make contact in writing to request participation and enclose information about the research; and to make a first call to explain the research project more in detail. Following these suggestions, the researcher made contact with experts by email with an explanation of the study, its aims and objectives, the main themes of the research, and an explanation that stressed the relevance of their participation to the research and contribution the field of innovation. Busse (2003, cited in Bogner et al., 2009, p.165) recommends a first call prior to the interview to explain further the research. However, the thorough explanation and information provided in the first email meant that this was not necessary, and the times and dates were effectively agreed by email. Calls were made via Skype technology and were recorded using the application of 'Call Recorder'.

The interviews were conducted after the case study as this helped the researcher to gain more understanding of the subject and thus conduct the interviews more competently having thus acquired more expertise in the subject of digital marketing, and patterns of small digital marketing agencies. An overview of the experts is provided in Table 3.6:

Expert	Expertise
Expert 1	Digital tools, service models development
Expert 2	Digital Technology, SEO and knowledge sharing (Academia)
Expert 3	Digital consultancy, SEO
Expert 4	Digital marketing consultancy and training
Expert 5	Digital media and technology application for marketing, knowledge sharing
Expert 6	Digital technology, digital marketing (Academia)
Expert 7	Digital marketing innovation, technology (Academia)
Expert 8	CEO Digital Developing Solutions
Expert 9	Digital marketing consultancy
Expert 10	Digital marketing consultancy
Expert 11	Marketing strategy consultant
Expert 12	CEO large digital marketing agency
Expert 13	Managing director large digital marketing agency

Table 3-6 Expertise of participants (Case studies)

### 3.6.2 Data Analysis Techniques

Braun and Clarke (2013) highlight four common methods to qualitative analysis, each with their own established practices: thematic analysis (TA), interpretative phenomenological analysis (IPA), grounded theory (GT), and pattern-based discourse analysis (DA). The study used the method of inductive thematic analysis

for it is one of the most widely used methods in qualitative data analysis. Furthermore, it provided flexibility in terms of the data collection methods and sample size given that the method can be used in any type of research (Braun and Clarke, 2013).

The other analytical approaches were acknowledged but discarded as inappropriate to the study. For instance, the emphasis of IPA on participants' personal experiences and self-reflection indicated that the approach was better suited to psychologicalbased studies. With regard to grounded theory, although it is extensively used in social sciences qualitative research (Strauss and Corbin, 1990) the focus on generating theory from the collected data without relating to any previous literature did not make this approach applicable to the study, which was guided by the literature. Moreover, grounded theory is more suited to larger research studies where time is not an issue. Finally, DA, which is also widely used in different fields of social science, was not considered for its particular emphasis on the meaning of language remained better suited to a linguistic discipline.

## 3.6.2.1 Thematic Analysis Framework

Braun and Clarke (2013, p.174) define the inductive TA approach as, "a method for identifying themes and patterns of meaning across a dataset in relation to a research question". The study followed their process, which includes seven different stages (Braun and Clarke, 2013, p. 202):

- Transcription
- Reading and familiarisation
- Coding
- Searching for the themes
- Reviewing the themes (themes and subthemes)
- Defining and naming the themes
- Writing and finalising the analysis

### **3.6.2.1.1** Transcription, reading and familiarisation

All the interviews (case study and expert interviews) were transcribed into Word documents. Each document was formatted to follow a similar presentation in order for data and themes to be more easily identifiable. The transcription was read several times and any words or expressions that were not correct were checked against the online and electronic documents or the participants were asked by email to confirm outstanding issues. This stage ensured that any sensitive information or expressions that could have potentially identified the organisation were anonymised. Notes and reflections were also written as this helped as a sense making process.

Based on Shaw's (1999) argument that the researcher interprets the interviewees' answers throughout the data collection, the analysis started with the first interviews, as the first answers contributed to developing some understanding when further exploring succeeding responses (Saunders and Lewis, 2012). This process also allowed the researcher to identify emerging patterns (Patton, 1987) and consider possible categories.

### 3.6.2.1.2 Coding

The study applied two levels of coding. The first level was broader and aligned with the objectives and questions of the research, which provided a conceptual framework. A complete coding approach was used, as opposed to selective coding. Although both methods are used in TA, the latter, which selects specific data to code, was more relevant to the approach of pattern based DA (Braun and Clarke, 2013). Instead, the complete coding approach allowed the researcher to code all the data applicable to the questions of the study.

Data-derived, or semantic, codes were used to code the quotations to ensure the coding reflected the words of the participants. Saldaña (2013) refers to data-derived coding as 'In Vivo coding' and stresses that it maintains the focus on what participants have said and thus allows for the possibility of identifying recurring words, which might highlight patterns. Following the guidance of Braun and Clarke (2013), the researcher also ensured that codes were succinct, and reflected precisely

the meaning of the quotations. Quotations that were not seen as relevant were not coded. No computer software was used and instead, each code was written next to the selected text. The study also followed the acknowledged rules of qualitative coding (Thomas, 2006) in that some selected text was included in more than one category, while others were not included in any when they were not related to the research objectives. Different coding that referred to similar quotations were merged, which lead to broader meanings of the code.

### 3.6.2.1.3 Themes

A second level of coding brought together all the coded text into themed categories while still distinguishing recurring codes of different meanings. In order to recognise where each coded quotations came from, each was given a number that related to the participant. This not only allowed for the identification of participants' quotations in the writing but also helped to easily go back to the original transcription and coding sheet if necessary. Each theme was then reviewed to identify other potential "subtopics.... contradictory points of views....new insights... appropriate quotations" (Thomas, 2006, p.242). Some overarching themes were identified that enabled the identification of broader ideas, and each were reviewed to identify other potential "subtopics.... contradictory points of views....new insights... appropriate quotations" (Thomas, 2006, p.242).

Although these stages provided a solid structure concerning the categories, the analysis subsequently examined the relationships between the categories comparing and highlighting possible similarities, conflictive and challenging ideas, or ideas that seemed more or less significant to the research objectives. To ensure the reliability of the analysis process, some of the procedures carried out by the researcher were checked against the following checklist to ensure effective and rigorous thematic analysis (Braun and Clarke, 2013):

- Transcription: The transcribed data were checked against the recording to ensure no mistakes were made
- Coding: A thorough coding process was followed, which implied that themes were consistent, listed in a spreadsheet, and checked against each other

- Analysis: The researcher ensured that the data was used to explain and not just describe
- Overall: Time was given to the analysis to ensure it was as thorough as possible. The researcher ensured that the writing of the findings was consistent with the type of analysis used

## 3.6.2.1.4 Writing and Finalising the Analysis

This study reports the findings of the case studies in Chapter 4. The findings from the study of single case were presented in the form of a narrative and within-case analytic comments, and summarised in a table. A separate section encompassed the key themes from the cross-case analysis. These were also presented in the form of a narrative and summarised in tables. Key themes were also discussed against the theoretical concepts and issues from the literature. Moreover, the findings from the expert interviews are presented in Chapter 5 along with recommendations aimed at enhancing the innovation process in small digital marketing agencies in the UK. A summary of key results with reference to each objective of the study was presented in the conclusion section in Chapter 6. The contribution of the study and the limitations of the research were also highlighted in the conclusion chapter. The complete study map methodology is illustrated below in Figure 3.10.



Figure 3-10 Complete study map methodology (Source: Author)

# 3.7 Quality Criteria and Techniques

Qualitative research is characterised by methodological variations and a lack of fundamental principles for quality assessment; however, it still requires rigour to ensure a theoretical contribution (Bansal and Corley, 2011, cited in Saunders et al., 2015). Yin (2014) highlights the criteria of construct validity, internal validity, external validity and reliability in testing quality in case study research. Whilst these criteria derive from a positivist viewpoint and are most often used in the evaluation of quantitative research, they emphasise a thorough approach to research, which was more suitable to the study than the emergent approach of radical constructivism (Stake, 1995). Braun and Clarke (2013) whose interests lie in qualitative research, and Guba and Lincoln (1994) also acknowledge these criteria through broader

interpretations. Based on these arguments and the claim of Yin (2014) that good quality case study research helps to lessen doubts in the scientific community about the methodology, the study applied the four aforementioned criteria.

### 3.7.1 Construct Validity

Construct validity is an appraisal of whether the collection of data measures the issue sought to be measured (Braun and Clarke, 2013). The focus is on assessing whether the measure of the data collection was appropriate for the research. Within this study, construct validity was achieved by methodological triangulation using different data sources such as case study, documents and expert interview methodologies, which complemented and substantiated some of the findings. Moreover, data triangulation was possible as some of the data was validated with the use of multiple sources of evidence, such as: the literature review that provided insight into the guiding theoretical framework of the study; interviews with small digital marketing agencies; secondary documents; and expert interviews. The theoretical pluralism approach of the study, where the theoretical perspectives of social capital, knowledge and structural capital informed the concept of the innovation process, enabled the interpretation of the data from multiple theoretical angles. The interpretation was informed by Smith (1996. cited in Braun and Clarke, 2013, p.286) who stated that triangulation in qualitative research refers to recording different voices aimed at offering a fuller and more comprehensive story, as opposed to an accurate one.

### 3.7.1.1 Internal Validity

In qualitative research, Guba and Lincoln (1994) acknowledge the criteria of internal validity through the criteria of credibility, which means establishing whether the findings of the research are credible to the researcher. Internal validity was achieved through the literature review from which the guiding theoretical frameworks were derived that reflected the research objectives and supported the design of the interview guidelines. The interview guidelines helped to maintain a relevant focus throughout the collection of the data. Furthermore, the researcher conducted pilot interviews with a few digital marketing agencies in order to test the interview guide.
Internal validity was reinforced since the topic of the research was seen as representative of small digital marketing agencies. This was confirmed during the first stage of the research concerning the preliminary literature review, which also highlighted that the concepts of service innovation and inter-organisational relationships had been researched in other sectors. Whilst additional procedures are available to ensure internal validity, such as pattern matching, where empirical patterns are compared with predicted ones, and explanation building, where theoretical statements are made (Yin, 2014), these were not applied, as they were not seen appropriate to the exploratory and descriptive nature of the study. In fact, Yin (2014) highlights that internal validity is only relevant to studies that aim to ascertain causal relationships between different elements (Yin, 2014), which did not apply to this study.

## 3.7.1.2 External Validity

The main challenge of gualitative and case study research is perceived as the difficulty in generalising the findings to a broader and different population (Silverman, 2005; Braun and Clarke, 2013). However, it is acknowledged that readers can generalise through their own interpretations (Merriam, 2009; Braun and Clarke, 2013). Braun and Clarke (2013) mention that, due to the attention to context, generalisation needs to be carried out through the concept of flexible generalisability or transferability, in the extent to which a study can be transferred to other population and contexts. Thus, it is the readers who decide whether findings can be applied to their context (Guba and Lincoln, 1994), and as such, information on the circumstances and context of the study is important to allow for the assessment by readers. Flexible generalisability was addressed with the identification of key contextual characteristics regarding the context of small digital marketing agencies, and these are presented in the cross-case analysis section (Chapter 4). Whilst the purpose of the study was not to achieve statistical but analytical generalisation (Yin, 2014), by highlighting the particularity of the innovation process in the context of small digital marketing agencies, the external validity was reinforced by the use of a several cases that allowed data to be generalised over several organisations (Yin, 1994).

## 3.7.2 Reliability

The criteria of reliability, which refers to the possibility that identical findings could be repeated by different researchers, suggests an objective coding which cannot be fully applied to qualitative research due to its subjective nature (Braun and Clarke, 2013). Braun and Clarke (2013, p.279) interpret the criteria of reliability through the 'trustworthiness' and 'dependability' of the methods used in the data collection and analysis. In order to demonstrate trustworthiness, the study emphasised the transparency of the research through a detailed step-by-step procedure with regard to the selection and access to cases and experts, the interview process, and the recording and analysis of the data. Based on the reliability criteria highlighted by Yin (2014) a case study protocol was developed during the data collection, which involved a similar process for each interview with identical initial questions. Furthermore, a case study database was developed that encompassed transcribed interview data, notes, link to sources and documents (PDF when possible). This provided a more robust management of the data and data collection related processes.

# 3.8 Summary and Link

This chapter presented the research methodology adopted in the study. The philosophical position of the researcher was highlighted via the ontological, epistemological and axiological assumptions that were discussed at the beginning of the chapter. The approach of the research as well as the methodological choices and the research techniques and procedures were extensively discussed and justified in the second part of the chapter. Finally, the chapter concluded with a discussion on the quality criteria and techniques to assess the quality of research. The following chapter presents the research findings from the case studies.

# **Chapter 4 - Research Findings – Case Studies**

# 4.1 Introduction

Chapter 3 presented the framework of the research with the justification for the research methodology. This chapter presents the empirical findings of the case studies, resulting from the within-case and cross-case analysis. The chapter is organised into the following three main sections:

- Firstly, the within-case analysis presents insights gained during the examination of the nature of the innovation process, and characteristics of social, knowledge and structural capital in each of the thirteen small digital marketing agencies. It also provides insights into the implications of social, knowledge and structural capital for the innovation process
- Secondly, the cross-case analysis provides insights gained from highlighting the similar and contrasting patterns across the thirteen cases on the nature of their innovation process, and the characteristics of social, knowledge and structural capital. This section also provides the implications of social, knowledge and structural capital for their innovation processes. This section opens with an insight into the UK context in which small digital marketing agencies operate
- Finally, the findings are discussed in relation to the theoretical content presented in the literature review (Chapter 2)

# 4.2 Within case analysis

## 4.2.1 Case Study 1 – Agency A

## 4.2.1.1 Background to the case study

A is a small agency located in the North West of England. It began operating in 2004 and currently employs 38 people. The agency, which started as a web design and web development organisation, moved into digital marketing in 2009. Their focus is on web design, brand management, application development and corporate identity. In 201X agency A received funding from a regional funding scheme, which allowed the organisation to expand. In 201X, it was recognised as one of the fastest growing digital marketing agencies in the North, and in 201X their turnover approached £2.5m. The agency was a finalist at awards that recognises innovation and best practices in recruitment. The agency was also shortlisted at the 201X XXX Festival for a specific innovative story telling project.

## 4.2.1.2 Interview details and document review

Two employees were interviewed, and details of the participants are presented in Table 4.1.

Agency	Participants	Position in the organisation
Α	Participant 1	Head of Inbound (Director)
Α	Participant 2	Account Manager
Table 4-1 Details of participants - Case study A		

A review of secondary source documents was carried out in addition to the interviews to provide complementary and clarifying insights on the agency. These sources are listed in Table 4.2.

Document references	Documents
Beedinent references	Becamento
1a	Agency's website
2a	Companies House (company overview)
3a; 4a	Facebook and Twitter pages
5a	Chamber of commerce communiqué
6a	Local press articles
7a; 8a, 9a	Regional press articles

Table 4-2 Secondary source documents reviewed - Case study A

This section highlights the findings of case study A with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

## 4.2.1.3 Findings

#### 4.2.1.3.1 Nature of the innovation process

#### • A thorough procedure

The agency innovate their internal processes by adopting creative ways of pitching to new and existing clients. However, both participants stressed that the strength of the agency lies on the innovation of service solutions within the realm of website development with a focus on the content and technical aspects of websites, such as loading speed. This has subsequently resulted in innovations of the features of services as well as its delivery processes. As the agency emphasises a creative culture, as seen in document 1a, the Head of Inbound (Participant 1) also depicted a systematic culture that is reflected for example by their precise sitting arrangements, their need for planning requirements and the sequential personal development programmes within the agency. This was further evidenced by their justification of the need for a thorough procedure, which encompasses several briefing sessions with clients, understanding the customers in the targeted market, developing customer profiles, researching ideas, designing the solution, developing, implementing and reviewing. Furthermore, validation from clients is required following the design, development and implementation stages.

#### 4.2.1.3.2 Characteristics of social, knowledge and structural capital

#### Competition and mutual benefits

With regard to the relationships that the agency develops within their task environment, Participant 1 highlighted other local digital marketing agencies with whom they occasionally worked; however, this is based on the requirement that both agencies are not in direct competition. These ties are weak since contact is made only when required and trust is low due to the potential risk of competition. Weak and mistrusted ties have also been established with recruitment specialists, which are nonetheless mutually rewarding, as described by the Account Manager (Participant 2), who referred to ties aimed at creating mutual business opportunities. The reputational benefits are further evidenced in their social media (reference 3a, 4a), which makes references to recruitment awards and invitations to speak at global recruitment events.

## • Expertise

In contrast, ties with clients are strong, which is reflected by the frequent communication during and between projects. Trust with clients is also present and has evolved through the agency drawing attention to its ability to deliver services and show added value, as stated by Participant 1:

"You've got to speak to clients really confidently about what we're doing and why we are doing it and make them buy into what we're doing for them so that they know it's going to improve and the money that they paid to us is going to be worthy".

## • Content knowledge and knowledge of implications

The agency relies on technical and valued knowledge acquired through formal educational qualifications and through certification from technology providers, such as Google. This was further highlighted in their recruitment advertisements on their website (document 1a). Both participants stressed the attention given by the agency to understanding the implications of technology for clients, which they also consider as knowledge. Knowledge is a contributor to trust since it is seen to positively enhance the confidence of employees with regard to clients, which enables them to present a more competent image and consequently develop trust.

## • Physical and social media

Systems and procedures to capture knowledge and communicate with clients were seen as essential to both participants. However, both mentioned that employees hold a large part of the agency's knowledge. For the Account Manager, this is problematic as knowledge can easily leave the organisation. Nevertheless, it is also captured in reports, methodologies and routines as well as the best practices that had been developed regarding different channels used in service solutions. Social media and traditional marketing-based processes are adopted to develop and maintain good communication. Communication is also strengthened by the use of a client services team, which resulted in keeping a consistent and regular contact, as described by Participant 2:

"We have account managers who are relationship managers effectively and their main job is communication to clients. So they are kind of the internal point of contact here to ensure that the work gets done, but also to communicate with the clients, to educate them, speak to them on the phone, by email in order to keep them up to date with the project".

## 4.2.1.3.3 Implications for the innovation process

#### • Efficiency and internal based resources

The ties that agency A has developed with other digital marketing agencies, whilst being weak generates new learning. This is because employees are in contact with new tools and new working approaches, which are later applied internally in the development of new innovative service solutions. This means that the process is further reliant on knowledge that is based within the organisation. Furthermore, the use of best practices enables the effective weekly planning of tasks during projects, which makes the process less chaotic and more efficient.

## 4.2.2 Case study 2 – Agency B

#### 4.2.2.1 Background to the case study

Agency B is a small, full service, integrated marketing agency group in the north of England. It was established in 201X and consists of three different agencies with specialisms in digital, brand and digital marketing. The agencies operate independently and as divisions of the group, which employs 34 across the agencies. Their services include new product development, social media, advertising, mobile solutions and brand development among others. In 201X and 201X, Agency B. was listed in the top 40 integrated agencies in the North of England. In 201X, it was nominated for a XX award in the category of Creativity and Innovation.

## 4.2.2.2 Interview details and document review

One employee was interviewed, and details of the participant are presented in Table 4.3.

Agency	Participants	Position in the organisation
В	Participant 1	Co-Founder and Creative Director
Table 4-3 Details of participant - Case study B		

A review of secondary source documents was carried out in addition to the interview to provide complementary and clarifying insights on the agency. These sources are listed in Table 4.4.

Document references	Documents
1b	Agency's website
2b	Companies House (company overview)
3b; 4b	Facebook and Twitter pages
5b, 6b, 7b	Regional press articles
Table 4-4 Secondary source documents reviewed	1 - Case study B

This section highlights the findings of case study B with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

## 4.2.2.3 Findings

## 4.2.2.3.1 Nature of the innovation process

## • Participatory

The Co-Founder and creative director identified two main innovations within the agency; these are organisational innovation and service solution innovation. The organisational innovation relates to the creation of a new film content business intended for websites, which was developed as result of client demand and did not follow any particular method. Moreover, whilst the agency follows a course of action with regard to the development of innovative service solutions, the participant emphasised its participatory nature as the whole organisation is consulted at the initial stages to discuss the requirements of a project and to brainstorm ideas. Tasks are subsequently assigned to specific teams with the opportunity for employees to

participate in the process at any time. The participant added that this approach is characteristic of the agency and was contributory to their innovation.

"I think we encourage innovation, I know it sounds like a poor answer but we are not very structured as a business because you cannot be structured in a creative business, you have to have a bit of chaos".

## 4.2.2.3.2 Characteristics of social, knowledge and structural capital

## • Preferred network

Agency B has developed strong ties with third party providers, who are trusted to deliver the outsourced work based on previous experience. These are part of the agency's preferred providers network that they have generated over time. The reliance on external providers is further underlined on the agency's website (document 1b), which invites providers with different specialisms to make contact with the aim to develop mutually beneficial relationships.

## Mutual understanding

Clients are also recognised as strong and trusted ties, although the strength of the relationships is dependent on the personality of the clients and the size and culture of their organisations. Trust is reciprocal, which mean that clients are able to understand the suitability of the service solution under development whilst the agency manages a high level of confidential information about the client's operations. This trust is also strengthened with confidential agreements.

## • Creative and technical

The creative focus of the agency is reflected by the participant's view that too much knowledge constrains creativity and consequently limits innovative ideas. Nonetheless, knowledge of finance, and planning and management is recognised as relevant for it helps in the running of the organisation. However, there is particular recognition of the creative and technical practical knowledge required in developing innovative service solutions. This is reflected in the following statement:

"Knowledge of technical things, so for example our studio do all the artwork and supplying things out that need to get reproduce need to get a massive knowledge of software and printing technics ... you have an opposite side to that, which is the creative department both on and off line that have to have the freedom to ignore all those things and just create ideas".

#### • Formal and informal practices

The agency applies both formal and informal practices to develop and maintain good communication with clients based on their requirements. These practices include formal meetings and socialising events, among other activities. Systems and processes are also used to capture knowledge. The participant mentioned the use of an online timesheet to measure the profitability of each performed task and the practice of monthly creative review meetings to gather feedback on projects. This stresses the agency's reliance on systems and practices for their activities.

#### • Physical

However, most of the business-related knowledge, and creative and technical knowledge are captured in employees, which is potentially problematic should they leave the organisation. The participant confirmed this possibility:

"We had a senior member of staff who was a client services person, unfortunately we had to let him go, we talked a lot about what that would mean for the business and the clients of the business that was looked after and we talked about it and worried about it thinking that the world would end because this person was going".

#### 4.2.2.3.3 Implications for the innovation process

## • Provider dependent and an overall focus

Agency B evidenced the implications of social and structural capital on the innovation process. The strong and trusted ties that agency B has developed with some providers contributes to the generation of occasional innovations during outsourced work on service solutions, which is fed back into the agency. By innovating on their behalf, the innovation process is therefore directly reliant on their external impute. Whilst organisational practices are not considered particularly useful to enable

creativity, some are acknowledged to provide an overall focus to the innovation process. This is the case, for instance, in the 'briefing projects' that are developed for each project, and contain detailed activities to allow for planning. However, these procedures need to be flexible enough to adapt to unexpected changes.

## 4.2.3 Case study 3 – Agency C

## 4.2.3.1 Background to the case study

C is a small digital marketing agency established in 200X with a particular specialism in CRM, customer engagement, and web support and social media in the leisure industry. The agency, which employs 27 people and is located in the North of England, was originally specialised in developing SMS marketing services in order for companies to better communicate with clients. In 201X, the agency was a finalist in the XXX digital industry awards, nominated for CRM and Data in the category of Under 40 staff.

## 4.2.3.2 Interview details and document review

One employee was interviewed, and details of the participant are presented in Table 4.5.

Agency	Participants	Position in the organisation
С	Participant 1	Co-Founder and Commercial Director
Table 4-5 Details of participant - Case study C		

A review of secondary source documents was carried out in addition to the interview to provide complementary and clarifying insights on the agency. These sources are listed in Table 4.6.

Document references	Documents
1c	Agency's website
2c	Companies House (company overview)
3c; 4c	Facebook and Twitter pages
5c	Company profile (RAR directory)
6c	PDF Web development process

Table 4-6 Secondary source documents reviewed - Case study C

This section highlights the findings of case study C with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

## 4.2.3.3 Findings

#### 4.2.3.3.1 Nature of the innovation process

#### A thorough procedure

The technically inclined culture of the agency means that their focus is on developing innovative organisational processes aimed at enhancing internal efficiency, and innovative products that are sold to clients in order to enhance profits. This culture is also reflected in the technical nature of the services that are offered on their website (document 1c). The Co-Founder and Commercial Director highlighted that no process is followed and that innovation relies on identifying internal issues that need to be resolved, and on identifying market needs by reading about the market and listening to clients and customers. In contrast, the development of innovative service solutions that results from client demands follows different stages that include: the clarification of project specifications and requirements, the design and development of the solutions, testing and implementation, and the provision of support after implementation. The document 6c describes the process used for web development services.

## 4.2.3.3.2 Characteristics of social, knowledge and structural capital

#### • Expertise

Clients are identified as the main contact of the agency in the task environment. Strong and trusted ties have been established over years of custom and are characterised by frequent communication and confidence from the clients that the agency has the required expertise to deliver the work. This strength rests on close relationships, which are influenced by the crucial part that the agency plays in the activities of their clients, as noted by the participant:

"I've just looked at some reporting for a client that showed that we generated 26 000 bookings for them last week ... that's an average of 3.1 booking per occasion so you

know it's (...) £20 spend per head, it's a gigantic number really. So, we are an integral part of their business.

## Competition

In addition to clients, Agency C. is reliant on their clients' partners to deliver the work. However, these ties are weak since partners are considered potential competitors. Therefore, interaction is a requisite to perform the tasks on the basis that partners are part of the clients' services.

## • Experiences

Knowledge gained from experience is particularly valued in the agency, which the participant explains by the fact that neither Co-funder has university qualifications. Commercial and business acumen is therefore viewed as particularly relevant to gain clients and these are demonstrated through returns on investments and by running an efficient organisation. The relevance of organisational knowledge in ensuring the function of the agency is also evidenced with the recognition that it is attained through the diversity of knowledge within the agency. The agency also uses sources, such as Experian, which highlights the relevance of external-based data and expertise to their activities.

## • Internet based

Online systems and applications are extensively used in agency C to capture knowledge, such as Internal Wiki for the collection of ideas and questions regarding projects and technical matters. Systems, such as Google Docs, Dropbox and Trello, also capture data on competitors, suppliers and industries and are used to communicate with clients. Google Docs was described as particularly relevant during projects for it facilitates communication and sharing with clients. Its use is recommended at the start of new contracts for it is considered to enable the development of good relationships. The participant further mentioned that knowledge is captured in employees. However, the agency gives a particular attention to the practice of knowledge sharing, as mentioned by the participant. This means that it seeks to prevent being overly dependent on the individual knowledge of employees:

"I think we're pretty solid at making sure that knowledge is shared and not kept to one person. We usually do things in pairs as far as going out and seeing clients and ... overtime the account managers go on an appointment they'll take a head of business with them ... even if that meeting isn't about a particular one of these businesses they'll still go with them for the knowledge.

## 4.2.3.3.3 Implications for the innovation process

## • Consistency and two-way interaction

Knowledge has clear implications for the innovation process since knowledge of competitors, suppliers and industry generates a focus when completing tasks throughout the innovation process by providing an understanding of who and where the service solutions are aimed. Consequently, this knowledge provides consistency throughout the process. Moreover, the extensive technical knowledge of the agency allows for time tracking and task planning, which results in a process that is faster and more efficient. Systems, such as Google Docs and Trello, are used to communicate with clients during projects and have contributed to the efficiency of the process whilst simultaneously helping to create a two-way interaction process.

## 4.2.4 Case study 4 – Agency D

## 4.2.4.1 Background to the case study

D is a full service communication agency located in the South West, which started in 200X and employs 30 people. Digital communication represents about 80% of their services. In addition to their paid digital media channel, the agency specialises in the production of new technology, new platforms, and CRM systems as well as content management and strategy. In 201X, agency D was recognised as one of the top 20 UK agencies with fewer than 25 employees.

## 4.2.4.2 Interview details and document review

Two employees were interviewed, and details of the participants are presented in Table 4.7.

Agency	Participants	Position in the organisation
D	Participant 1	Creative Director
D	Participant 2	Digital Media Manager
Table 4-7 Details of participants - Case study D		

A review of secondary source documents was carried out in addition to the interviews to provide complementary and clarifying insights on the agency. These sources are listed in Table 4.8:

Document references	Documents
1d	Agency's website
2d	Companies House (company overview)
3d; 4d	Facebook and Twitter pages
5d	Business Exchange (Profile)
6d	Brand Magazine (Brand Republic – Article)
Table 4.9 Secondary service decomments re-	wiewed Cose study D

Table 4-8 Secondary source documents reviewed - Case study D

This section highlights the findings of case study D with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

## 4.2.4.3 Findings

## 4.2.4.3.1 Nature of the innovation process

## • A service development process

The focus of innovation in agency D is on internal processes aimed at developing operational procedures that are compatible with their clients and on transformational products and service solutions suited for their clients' business strategies that help them work differently. The Creative Director (Participant 1) highlighted the example of a financial service product developed by the agency with client funding via an innovation lab (FinTech) that followed the lab's innovation process. However, they emphasised that the majority of their innovations referred to and were embedded in the service solution developed in response to the demand of the client. The Digital Media Manager (Participant 2) confirmed that:

"... Very often innovation will be borne out of a solution for that problem, absolutely in every case. We never sit down and just think of something randomly and go 'oh, let's

go and do that'. It's not viable, it's not commercially viable to do that ... it's got to start with a need".

Therefore, the different stages used in their innovation are referred to as the service development process. The different stages of this process include the acknowledgement of the client brief, the exploration of the targeted market, the consideration of past experiences and projects, the scheduling of tasks and allocation of responsibilities, the design and development of solutions, the delivery of the solutions, and the review of the project.

## 4.2.4.3.2 Characteristics of social, knowledge and structural capital

#### Contractual and resources generation

D has established ties with other digital marketing agencies, which, during projects supply them with the resources they are lacking. These ties are weak for contact is made only when required and the trust is contractual. The Digital Media Manager explained that these are based on the understanding that each will deliver the work that is required. Nonetheless, they are an influencing motivation for the agency to perform better than their competitors. The Creative Director also highlighted that the purpose of the ties between the agency and the local University and consequent interactions, are solely for recruitment purposes through graduate schemes. This indicates weak ties.

#### Mutual understanding and a motivated support

However, ties with clients are strong for these are based on years of collaborative relationships and reflected by on-going interactions and a solid awareness from the agency that collaboration requires the adoption of approaches that are adapted to the level of knowledge held by their clients. Trust is present in the form of clients' reliance on the agency's ability to deliver the work on time. Ties with technology partners, such as Google, are also included for interactions include exchanges of a confidential nature and the support provided during projects. The trust is reinforced by an implicit rule of appropriate behaviour with regard to client appropriation. However, the Digital Media Manager (Participant 2) acknowledged that interaction tends to be initiated by technology partners for commercial purposes.

#### • Professional development and understanding of consumers

The agency pays particular attention to employees acquiring knowledge from different sources. This is further evidenced in their social media (documents 3d and 4d), which makes references to trainings and events. The realisation of projects is dependent on the coming together of different core specialist knowledge, therefore implying a sharing culture within the agency. This core creative and technical knowledge is developed from experience and past performances in the building of brand awareness and development of advertising campaigns. To ensure that projects are delivered successfully this knowledge needs to be complemented with knowledge of the market and consumer behaviour, as confirmed by the Creative Director (Participant 1):

"... data is a big part of it. If we are being asked by an e-commerce business to help them increase their sales by 50% year on year then it all comes down to the dat: who are we targeting, who are they, where are they going, where are they shopping, how much they buy..."

#### Software

Both participants mentioned that knowledge used by the management of the agency is captured in account and project management software systems, whilst digital marketing related knowledge is captured in physical assets, such as reports, solutions (i.e.: website and coding, campaigns). However, they recognise that the core creative and technical knowledge essentially remains within people. Therefore, the agency has developed an increasing practice of capturing creative and technical knowledge. However, there is also evidence of issues with regard to understanding that knowledge as the Digital Media Manager added:

"There's lots of stuff there in terms of documents that go out to clients, but it's whether then someone else could come in and interpret that I don't know".

The agency does not use any particular system or process to enhance their communication with the task environment with the exception of clients. The client service department is responsible for maintaining a good liaison during projects by

providing updates on the tasks in the process and technical explanations when required. Contact is also maintained in between projects when applicable.

## 4.2.4.3.3 Implications for the innovation process

## • Specified resources requirement

The strong ties that the agency has established with clients and technology partners have implications for their innovation process. Demands from trusted clients for special service solutions influence designs, and subsequently leads to the requirement of specific resources for their development throughout the process. Direct support from technology partners and the up to date technical knowledge strengthen the technical potential of the process to develop technically enhanced service solutions. The Digital Media Manager acknowledged that:

'It can be a useful source of new ideas, it's difficult to keep on top of everything technical that is going on across such a broad area. Sometimes things crop up you hadn't thought or didn't know about. So from a partner's point of view they can definitely feed during projects - that will help our services to be better technically".

## 4.2.5 Case study 5 – Agency E

## 4.2.5.1 Background to the case study

Agency E is a full service digital marketing agency located in the North of England, which was established in 199X. The agency employs 20 people and specialises in digital marketing, branding, website design and development, applications, video and animation and operates mostly in the healthcare, science and technology sectors. In 201X, agency E won several awards for their digital contribution to the healthcare sector. In 201X, the agency was recognised as one of the top digital agency of the North.

## 4.2.5.2 Interview details and document review

One employee was interviewed and details of the participant are presented in Table 4.9.

AgencyParticipantsPosition in the organisationEParticipant 1Co-Founder and Client Services DirectorTable 4-9 Details of participant - Case study E

A review of secondary source documents was carried out in addition to the interview to provide complementary and clarifying insights on the agency. These sources are listed in Table 4.10.

Document references	Documents	
1e	Agency's website	
2e	Companies House (company overview)	
3e; 4e	Facebook and Twitter pages	
5e	Info graphic presentation	
6e	BIMA (Digital community innovation	
	platform)	
7e, 9e	Regional press article	
8e	FCS Associates (Grant and tender experts)	
Table 4-10 Secondary source documents reviewed - Case study E		

This section highlights the findings of case study E with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

## 4.2.5.3 Findings

## 4.2.5.3.1 Nature of the innovation process

## • Linear and rigid

Agency E has developed innovative internal processes aimed at improving organisational procedures such as new ways of interacting with clients in order to adopt a more proactive approach culturally across the whole organisation. The Co-Founder and Client Services Director also mentioned the development of innovative service solutions and service delivery processes, and based on this, the agency considers service solutions as processes and innovations and refers to changes that are performed during the delivery of service solutions.

The scientific and technology disposition of the agency is reflected in their service offerings (document 1e). This disposition is also reflected in the linear method that the agency use to develop their innovative service solutions. This client led method includes the following stages: understanding the client project, designing, signing off from clients, development, signing off from clients, implementation and reviewing the project. However, there is evidence that this is not adapted to the practice of their clients. Therefore, changes are required to make this process more interactive, as highlighted by the participant:

"It's been very linear but our clients don't work like that any more. So our clients want to iterate and they want to try something and see if that works, try it and try again and other than that straight line you have got bumps; but our business process doesn't support the way our clients want to work. So we obviously want to work the way our clients want to work...".

## 4.2.5.3.2 Characteristics of social, knowledge and structural capital

#### Compatibility and communication

Agency E has limited contact with its task environment, other than with clients, who are one of the few contacts it establishes contact with. The participant confirmed this:

"I still think that the majority of contact is with clients that's the main thing".

The agency services clients of similar characteristics in order to provide a focused offering and position itself in the sector. Ties are strong, as the aim is to build long term partnerships and attention is given to avoid apathy from both sides, as based on previous experiences. Therefore, contacts are frequent, and on a daily basis, particularly with larger clients. These strong ties are evidenced at a professional level whilst the participant points out that a deeper and more intimate level could be managed that rests on the compatibility of personalities. Trust is understood to be present, resting on the ability of the agency to deliver service solutions as well as the attention given on informing clients throughout the duration of the project.

#### Resources generation

The participant mentioned ties with third party organisations from the voluntary and public sector and universities that are in the process of being developed. Relationships consist of occasional exchanges of promotional information as opposed to confidential information. This highlights a lack of trust and weak ties. Furthermore, closeness is difficult to assess, as there is less clarity on what the relationships involve, as explained by the participant:

"it's almost like the most lacking in authenticity in a way because at least sometimes with the client you can be quite clear on the transactional value between you and I know where my places is within this. But with the partners it's more difficult because the power swings and it's not always as clear cut".

## • Technical and industrial

In contrast to creative knowledge, knowledge of the sector (healthcare, science and technology) and technical knowledge are central foci of agency E since they are viewed as helping competitive positioning. The relevance of specialised knowledge is highlighted in the document 8e, which details a project carried out in partnership with the National Health Service. The agency is also attentive to knowledge of consumers, their use of technology and its implications. The participant pointed out that both facts and know-how are generally fed by senior positions to more junior positions, which highlights hierarchical ways of disseminating and developing organisational knowledge.

## • Standardised

With regard to the storage of knowledge there is evidence that agency E places significance importance on systems and processes. The participant mentioned their ISO 9001 accreditation, which implies that they keep extensive documentation for each project, records of every communication with clients, and reviews of projects that underline positive and negative points for future projects. Systems and processes are used to develop and maintain good communication only in relation to clients, and Account Managers seek to establish personal connections and long-term relationships.

## 4.2.5.3.3 Implications for the innovation process

#### Tailored activities

The strong ties that agency E establishes with clients has some implication for its innovation process since the knowledge that clients provide of their industry is fundamental to the identification of the requirements and needs of the market. This shapes the design and development activities of the process and enables the agency to develop a tailored service solution.

#### • Sequential

With regard to knowledge, there is a lack of a widespread technical knowledge across the organisation since only a few senior managers hold technical knowledge. This reduces the flexibility of the process as this limited understanding makes the sharing of ideas throughout the process more difficult, and therefore a more rigid sequential approach is required. Communication with clients also affects communication, as stressed by the participant:

"I would like to see the knowledge shared better because actually knowledge is so important. I am still getting to grips with some of the more basic technical things here so my knowledge base coming from different areas is quite limited, so I have to really push myself to be more aware of everything that's needed here".

#### 4.2.6 Case study 6 – Agency F

#### 4.2.6.1 Background to the case study

Agency F is a one-person digital marketing agency located in the North West of England that was launched in 201X. The agency specialises in the design of marketing solutions, the development of websites and applications, traffic and optimisation related services. In 201X, agency F was shortlisted for three regional business awards for creative agency, international achievement, and young entrepreneur. The agency provides services in manufacturing and construction sectors, as well as haulage, freight, charity and education, among others.

#### 4.2.6.2 Interview details and document review

One employee was interviewed, and details of the participant are presented in Table

4.11.

Participants Position in the organisation Agency Participant 1 Founder and Managing Director F. Table 4-11 Details of participant - Case study F

A review of secondary source documents was carried out in addition to the interviews to provide complementary and clarifying insights on the agency. These sources are listed in Table 4.12.

Document references	Documents	
1f	Agency's website	
2f, 3f, 4f	Companies House (company overview and accounts)	
5f, 6f	Facebook and Twitter pages	
7f	Local press article	
8f	Presentation (Google Analytics)	
Table 4-12 Secondary source documents reviewed - Case study F		

Table 4-12 Secondary source documents reviewed - Case study F

This section highlights the findings of case study F with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

#### 4.2.6.3 Findings

#### 4.2.6.3.1 Nature of the innovation process

## Client focused

Agency F carries out organisational innovation that was defined by the participant as radical. For instance, a new digital-based start-up company was created using digital expertise available in the agency. The participant mentioned that the innovation was organic and that no innovation process had been followed. He explained that it resulted from his awareness of a particular issue in a different industry that was raised by clients of the agency. Subsequently, he conducted further research and analysis of the issue and a digital platform was developed with the aim of filling the gap in that industry. However, based on the participant's account, it can be established that an elementary R&D process had been followed. Additionally, agency F innovates service solutions in response to the demand of clients that emphasises

the application of new technology. The participant highlighted that innovations required the agency to conduct a deeper exploration of the requirements of clients to help identify their exact needs, or, as he explained, to establish the difference between what they want and what they need. Subsequently, attention is given to understanding the target market, time is taken to think about the solutions, ideas are developed and solutions are delivered; moreover, regular checks are also undertaken after their implementation.

## 4.2.6.3.2 Characteristics of social, knowledge and structural capital

## Circumstantial

Agency F develops close ties with clients, although, according to the participant, the level of closeness depends on several circumstances, such as the personality of the contact and their position in the client organisation in terms of decision-making, the type of relationships that clients seek, and the type of services, support and fees. The latter highlighted that ties tend to be reliant on whether interactions are transactional or collaborative. This was confirmed by the participant's comment:

"Some are focused on you, are just here to do whatever we tell you to do, which is fine...The point of working with [an] agency is you can use them as a partner, ask them questions, tell them what you want them to do, and let them feed into that process, and that's when it works really well".

Nonetheless, these are trusted ties since trust is considered implicit, based on the large amount of sensitive information that the agency works with and the Non-Disclosure-Agreements (NDA) signed for each project.

## • When needed and commercial benefits

Ties are also developed with freelancers; these are relevant for they provide the oneperson agency skill resources that are needed to complete and deliver projects. However, despite their vital contribution ties are weak, for interactions occur only when required and whilst the agency relies on past experiences, trust is primarily based on contractual agreements. In contrast, the agency develops strong ties with several technology partners (i.e. Google, web hosting companies) and although interactions transpire when required, these are frequent and aimed at resolving queries and technical issues. There is evidence that the closeness of relationships is influenced by the highly mutual benefits they provide, as pointed out by the participant:

"I will say we have close relationships with our partners, the ones who we do want to work with - there are benefits to both parties so it's about making sure that [the] relationship is as close as possible".

These are trusted ties since technology partners are often well known and established organisations and the agency can implicitly rely on their technical support and components. Furthermore, trust rests on confidential exchanges apropos of clients. The participant also mentioned peer relationships. These weak ties are characterised by occasional informal exchanges of ideas and generic information, and are viewed as a positive influence although they remain informal due to competition.

## Digital know how

Furthermore, the participant identified that knowledge of digital marketing is most significant as it is knowledge that clients lack and that is necessary to perform the work. This was further confirmed when the participant identified online and experience-based digital marketing knowledge as the main contributors to their self-development. However, agency F recognises the need to communicate knowledge as well as gain knowledge for it contributes to the industry and to those of limited resources. This is supported by the recurring offer of technical knowledge through the website and social media of the agency (document 1f, 5f, and 6f).

#### Records

The focus on digital marketing knowledge is consistent with the relevance given to the use of systems and processes to capture technical knowledge. Technical knowledge is captured in technical guides that include a step-by-step helping process for future projects, and in informative blogs and case studies aimed at the task environment. Furthermore, technical knowledge is made available to freelancers when required through the website.

## • Client facing

Significance is also given to processes aimed at developing and maintaining good relationships with the task environment. The participant's account management approach provides evidence of this, which implies regular communication with, and updates to, clients. Similarly, regular updates are provided to technology partners, as it helps to identify the supports that these can provide. Furthermore, casual communication is used as it is recognised as an effective way to communicate with technology providers, as highlighted by the participant:

"Although they might phone us about a specific query that we've asked them, and we just talk it through and then extend the conversation a little bit. ... very informal, and I think the more informal those types of processes are the better they work, because they are more people based, and you can see through things".

## 4.2.6.3.3 Implications for the innovation process

## • Technical potential

There is evidence that the ties that agency F establishes with the task environment have some implications for its innovation process. For instance, the technical specialism and support made available by both freelancers and technology partners during the development of service solutions strengthens the technical potential of the process and therefore allows for the delivery of enhanced technical solutions to clients. The enhanced technical potential of the process is reflected in the following comment:

'We are a one person organisation, just on the web-hosting side they have about 100 staff within that building something like, something like that 100 or 200 staff so we've got that and a dedicated team of seven people that are involved in the work that we do. I can pick up the phone and speak directly to an engineer instantly and get any problem solved; that, in itself is so valuable when developing a solution".

## Internal based resources and interactivity

Moreover, the systems that capture the technical knowledge are able to retrieve and use knowledge at a later stage, which leads to the improvement in the capability of idea generation in the development of future solutions. This results in the further reliance of the innovation process on knowledge that is internally based. Efforts by the agency to communicate and update clients during projects also lead to the increased interactivity of the innovation process as confirmed by the participant:

"When you're working with the right people you can just get on the phone to them. They are an extension of your organisation, rather than you're just seen as 'you provide this to us'. It is a two-way relationship."

## 4.2.7 Case study 7 – Agency G

## 4.2.7.1 Background to the case study

Agency G is a full service marketing agency established in 200X, with specialisms in digital strategy, mobile and emerging platforms, integrated campaigns and web design. The agency employs 26 people and is based in the North of England. Agency G started as a work design agency that designed and built websites. It has consistently expanded over the years through developing its service offering, which in 201X led to the doubling of its turnover. In the past four years, the agency has tripled its workforce. In 201X, agency G won the award for the best digital marketing campaign aimed at agencies operating outside London.

## 4.2.7.2 Interview details and document review

Two employees were interviewed, and details of the participants are presented in Table 4.13.

Agency	Participants	Position in the organisation
G	Participant 1	Strategy Director
G	Participant 2	First Creative Manager
Table 4-13 Details of participants - Case study G		

A review of secondary source documents was carried out in addition to the interviews to provide complementary and clarifying insights on the agency. These sources are listed in Table 4.14.

Document references	Documents
1g	Agency's website
2g	Companies House (company overview)
3g, 4g	Facebook and Twitter pages
5g	Regional press article
6g	Technical recruitment details
7g	Regional article (Awards)
8g	Profile (RAR recommended agency)
Table 4 14 Secondamy several deserves	

Table 4-14 Secondary source documents reviewed - Case study G

This section highlights the findings of case study G with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

## 4.2.7.3 Findings

## 4.2.7.3.1 Nature of the innovation process

## Open and collaborative

Agency G innovates internal processes to improve the organisation; however, no precise steps are followed. The strategy Director (Participant 1) explained that internal processes are recurrent in the agency since employees follow them for a while and then overlook them for lacking efficiency. Therefore, a new procedure has just been explored that consists of an assigned member of staff carrying out research across the agency in order to identify issues about current internal processes and come up with potential solutions. Ideas are developed are most often implemented by senior managers at a later stage.

The First Creative Manager (Participant 2) added that service solution innovations are also carried out, with innovation interpreted as a new ways of approaching projects in order to generate innovative outcomes each time. Both participants identified several stages when developing these innovative solutions; these include a kick off meeting with the client, a framing of the project, design (front-end and development team), feedback from clients, the building of a solution and a post project review (PPR). The agency particularly considers openness throughout the stages of innovation and is reliant on internal collaboration, as pointed out by the Strategy Director:

"So if you are part of a team in production it's quite difficult to be thinking about innovation, to be thinking about ideas so we try to make sure that we include people that have capacity just to kind of think about ideas for certain projects as well ... So, it's more our communication and collaboration really for us, it allows people to have time to really think and explore creative solution for stuff.

The above comment stresses the importance of collaboration based on the diversity of specialisms in digital marketing activities and their respective characteristics. The First Creative Manager (Participant 2) emphasised the notion of an open process as they underline the significance given to the sharing and collective creativeness during projects. This was reflected in their comments:

"... we use the chat platform Slack quite a lot, so I'd say it's probably the quickest form and way that we get information out there in terms of ideas and inspiration, so we've got an inspiration channel".

## 4.2.7.3.2 Characteristics of social, knowledge and structural capital

#### • Ethos

The ties that agency G develops with the task environment mostly concerns clients. Both participants described these strong ties as friendly and trusted, based on the 'client friendly' approach adopted by the agency, which is viewed as a significant principle of the agency. This approach rests on the cultural compatibility between the agency and clients, and is identified as fundamental to the decision to undertake projects. This underlines the significance of culture and matching ethos in the development of their working relationships. The Strategy Director (Participant 1) highlighted the relevance of cultural compatibility:

"Some clients have no interest in that and these are the clients that don't to last very long. So, if we don't get on with a client we tell them we don't want to work with you anymore and we've had that a few times.... We've told the client you don't fit us as a culture so it's definitely not about the money or things like that but it's about the fit, because if you do that everyone gets stressed out and it's not fun for anyone."

## • Purposeful and impartial advice

Ties with clients are referred to as very close, which involve socialising, particularly with larger clients. These ties are closely purposefully maintained, as confirmed by the Strategy Director (Participant 1) who considers it a necessity in becoming indispensable to their clients.

"Yeah, we try to get as close as we can really, being invaluable to them as a kind of internal resource almost, especially for the bigger ones. So we feel the benefits to get very close to the business, so we can input our ideas and kind really inform them rather than looking from the outside as you know you don't get the best impact from the outside".

Consequently, there is emphasis on communicating daily during projects, on interacting frequently with clients on retainer agreements, and on providing regular updates to other clients. According to the Strategy Director (Participant 1), trust with clients is reflected when the agency is able to provide impartial recommendations, which do not entail the selling of services. Trust is also reflected by the exchange of highly confidential financial information, such as profits and margins, which is also part of the aim to play the role of partner as opposed to provider.

#### Resources generation and competition

Agency G establishes ties with other small agencies that supply them with complementary specialisms when required. These ties are described as weak whilst trust implies having successfully worked together in the past or working jointly based on recommendations. Weak ties have also been established with a few larger agencies when working jointly on a client project. The risk of competition means that there is a lack of closeness and trust, and a mutual understanding of good collaboration is required for the interest of the client. Therefore, interactions are focused merely on ensuring an effective delivery of the project, and exchanges are not considered confidential outside the project. The First Creative Manager (Participant 2) pointed out this lack of closeness:

"Some of the agencies we work with, I think, we could be closer with, have a beer and stuff. I think this is reciprocated, because we don't get invited from them and we don't invite them, it's not as big a part of the life of marketing agencies. I feel like everyone is quite insular when it comes to that side of things".

This comment emphasises the limited cooperative interactions between agencies based on the highly competitive nature of the industry.

## • Technical and educational

The Strategy Director (Participant 1) mentioned the relevance of technical knowledge acquired from experience, as opposed to education, although they recognised the need for a minimum educational knowledge on coding. This is also highlighted in the recruitment adverts on their website and social media (documents 1g and 3g). This experiential knowledge rests on performing new projects and implementing new technical processes, in addition to completing online training, identifying the latest technologies and learning from recent technical videos. He explained that the need for up to date knowledge is influenced by the client requests for better and more high-performing solutions. He also ses the importance of recognising knowledge from an organisational level, since it helps to secure clients and promote a further competent image across the industry, as described in the following comment:

"To be able to feel confidence in what we do. Knowledge is the reason why we can win work with bigger clients and charge what we do. Because we have the collective knowledge that we feel is best".

## • Phased approach and Internet based

The capture of knowledge and use of systems to do so is relevant to the agency as confirmed by the First Creative Manager (Participant 2):

"In terms of knowledge I'd like to think there wouldn't be a lot that's kind of tied to a particular person rather than the agency as a whole. I think working with digital helps because ... we're quite focused on keeping everything stored digitally rather than on paper anyway".

Notes on the technical processes and plans for digital solutions are drafted and stored. Web-based systems such as Google Docs and Slack, are used for they facilitate the sharing of knowledge both across the agency and with clients.

Furthermore, CRM software and a central operational system manage client interactions, data and projects across the agency. The latter is fundamental to the running of the organisation, as described by Participant 1:

"And then we also have a system for work, which keeps the office running, it's called the bible, the bible holds all info. Basically, what's that does is hold all clients' information, passwords, accounts, contract details, or server details, so you can get into this thing from anywhere and log in. You have to lock it down and make it secure so only people who work here can get into it".

#### Interaction and sharing

Agency G also applies several processes to develop good communication in relation to their clients. The First Creative Manager (Participant 2) explains for instance, that not having account managers oblige staff members to interact more with clients.

"We don't have any dedicated account handlers, so everyone here that speaks to their client also works on something ... so no one actually doesn't not do the work, which I think builds a really good thing, that everyone has to muck in and do the work and speak to the clients".

Moreover, by servicing a limited number of clients, the agency is able to give further attention to relationships and therefore provide added value. The increasing use of systems, such as Slack, for their facility to interact during projects stresses the sharing of knowledge as a principle to developing good communication.

#### 4.2.7.3.3 Implications for the innovation process

#### Internal based resources

Social capital has implications for the innovation process since ties with other agencies convey new ideas and ways of working that are fed back into the agency. Therefore, this new internal knowledge can be used and adapted to the development of future innovative service solutions. Additionally, comments made from clients in PPR permit to adjust activities in the process. Hence, the process can further rely on creative ideas generated internally and activities in the process can be improved.

## Creative potential

Structural capital also has some implications for the innovation process, as the systems used to communicate internally enable innovative ideas to be visible and shared across the agency, as highlighted by the First Creative Manager (Participant 2):

"... we use the chat platform Slack quite a lot, so I'd say it's probably the quickest form and way that we get information out there in terms of ideas and inspiration, so we've got an inspiration channel ".

This permits the sourcing of more innovative ideas that can be used during the idea generation phase, which leads to the overall increased creative capability of the innovation process.

## 4.2.8 Case study 8 – Agency H

## 4.2.8.1 Background to the case study

Agency H is a small digital agency based in the North West of England, which employs 14 people. The agency, which was established in 201X, specialises in the design, building and marketing of web and mobile applications and social media. In 201X, agency H established a branch office in another European country. The agency was also nominated for the award of best digital marketing campaign by the digital industry award for agencies operating outside London.

## 4.2.8.2 Interview details and document review

One employee was interviewed, and details of the participant are presented in Table 4.15.

Agency	Participants	Position in the organisation
Н	Participant 1	Founder and Managing Director
Table 4-15 Details of participant - Case study H		

A review of secondary source documents was carried out in addition to the interview to provide complementary and clarifying insight on the agency. These sources are listed in Table 4.16.

Documents
Agency's website
Companies House (company overview)
Company accounts and annual return
Facebook and Twitter pages
Local press article
Regional press articles

Table 4-16 Secondary source documents reviewed - Case study H

This section highlights the findings of case study H with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

## 4.2.8.3 Findings

## 4.2.8.3.1 Nature of the innovation process

#### • Flexible

Agency H innovates technical processes as learning experiences and skill development exercises. Most are open source projects although occasionally they are sold as products with the aim of making profits. Innovative products also encompass services that are originally developed for a particular client and subsequently sold to others. These innovations, whilst influenced by the Research and Development Expenditure Credit, do not follow a specific procedure, as confirmed by the participant:

"If I have everyone thinking about what they are doing that is innovating and have everyone writing it down and tell me, I then have a barebones report for my R&D tax credits, that makes money ... It's a lot of money so there is [a] real material reason for doing it"

In contrast to the previous innovations, agency H relies on a set of stages to develop innovative service solutions, based on the participant's explanation that a method is essential and necessary to provide innovative services, as opposed to standard services. The process starts with the development of a brief to gain a deeper awareness of the project, and then further understanding of market and requirements are sought as well as that of existing and potential customers. Subsequently, ideas are brainstormed and the solutions are designed, built, and delivered; finally, the whole project is reviewed. The sharing of ideas and knowledge is a particular feature of the agency, which the participant acknowledges as feasible due to the small size of the team. Furthermore, the agile approach adopted by the agency enables flexibility and responsiveness. The modification at different stages following feedback from previous projects provides evidence of this.

## 4.2.8.3.2 Characteristics of social, knowledge and structural capital

#### Purposeful and understanding

Agency H pays particular attention to developing ties, primarily with clients on retainer agreements, and the participant highlighted this:

"So 40% of our income comes from retained customers ... and it is perhaps from a commercial perspective the most important part of our business; to have an on-going relationships and a predictable income. It's not the most exciting bit but it means that we get to work to a goal, and it's very important".

The above comment shows the intentionality of maintaining strong ties with clients for revenue purposes, which is achieved by frequent and consistent interactions to provide updated information, and with regular interactions adapted to the needs of clients. There is evidence of trust, as the participant explained that trust is developed in the early stages of relationships with the help of a detailed presentation of the personality and culture of the agency, which provides clients with a comprehensive understanding of the agency. Whilst exchanges with clients are not acknowledged to be particularly confidential they are nonetheless significant for they refer to the exchange of information that clients are not able to acquire themselves, such as technical data and analytics.

## Resources generation and complementary

There is evidence of ties established with other agencies; this was acknowledged by the participant, who mentioned that, they occasionally call on larger agencies for specific skills that they do not have, or work jointly with PR firms to deliver complementary digital skills. However, these ties are weak since there is a lack of trust between agencies and a protective attitude towards clients, which therefore limits the possibility of partnering working. Moreover, as contacts leave their organisation connections are lost, which shows the vulnerability of the relationships and that ties are established between individuals, as opposed to organisations. This was highlighted by the added comment:

"You know a lot of relationships drift off in that period, often because the person that we dealt with will leave and someone will replace them and they have another relationship with another agency or they don't trust us because they don't know us".

#### • Personal connections and implicit

However, increasingly agency H carries out collaborative work with partnering agencies in the Pharmaceutical sector, as supported by the documents 1h and 5h, where they are able to bring their digital expertise. Ties with these agencies are strong due to solid personal connections and long-term and intimate friendships, as mentioned by the participant:

"That's in part because my wife works there. That has helped from day one; we have quite a close relationship with them and a good trust relationship there. We are doing good work together and we have very happy clients ... There is another agency for example we work with that I know the owner and I have known him for a quite a while, long before we started working together".

Consequently, there is an implicit trust and frequent interactions during and in between projects as efforts are made to keep in touch. According to the participant, trust is based on sufficient joint working experience, which means that partners will trust the quality of their work. Additionally, he explained that trust is enhanced when commercial arrangements are dealt with correctly.
### • Up to date and collective

Creative and technical knowledge is significant to the agency; the participant explained that, as a founder, their creative and technical background enables them to encourage a culture where such knowledge is given attention and, as a result, recruits employees who hold both types of knowledge. Technical knowledge needs to be recent and up to date in order to increase the potential for innovative service solutions. Additionally, knowledge of clients is significant since understanding them increases the possibility of working collaboratively, in contrast to simply being a supplier. This involves meeting with clients and customers to better understand issues and opportunities. Knowledge is also used to help develop these longer term partnering relationships as it is conveyed to clients. This was confirmed by the following comment:

"We do workshops sometimes. We have one client now it's become a regular thing. We have done it twice where they send staff over for some training days. They've got an in house marketing team and we teach them how some of the basics of what we do"

Efforts are made by the agency to develop knowledge at an organisational level by convening collaborative learning sessions during working hours and out of working hours, therefore ensuring the sharing of knowledge across the agency. These practices were highlighted on their social media (documents 5h and 6h)

#### • Physical and collective

Employees are encouraged to capture technical activities and technological knowledge using applications, such as Google Docs, to help new employees. Despite the emphasis on sharing knowledge, the participant recognised that four senior managers, as stated in this comment, hold the knowledge the agency relies on:

"Although people share information and knowledge on the intranet, that's interesting but that's not vital to the business, I guess, but the knowledge the four of us have is the important stuff ... There is also the project director. We have a lot of project management processes, and because he is the only person that's really in charge of that, again, if he leaves ... you get a lot of knowledge that goes with him."

Nonetheless, knowledge is still captured in routines and methodologies, which, according to the participant, provide some understanding of activities to team members when senior managers are not available. This demonstrates the presence of collective knowledge.

### Interaction

The lack of account managers is viewed as a method to develop good communication with clients, as employees are required to interact with them, which reduces mistakes and enhances transparency and, as a result helps deliver better results. The use of the intranet to share updates and information with clients is positively viewed as a simple practice to enhance efficient communication.

# 4.2.8.3.3 Implications for the innovation process

# • Agency and client led

The ties that agency H establishes with clients has some implications on the innovation process. This is evidenced by the fact that trusted relationships allow the agency to describe their contribution as more proactive with regard to the ideas, design and development of solutions. Consequently, the innovation process is led by the agency as much as the clients. This proactive contribution is highlighted by the following comment:

"... ultimately if they ask us to do something we will do it, but if we have time to maybe rethink that and we have the trust of our clients so we can say why don't we do it slightly differently? That all helps"

# • Efficiency

The use of systems and practices also has some implications for the innovation process as it enables tasks to be completed on time, which for the agency means a contribution to delivering quality solutions. Hence, the innovation process is more efficient, which leads to higher productivity and therefore higher profitability.

# 4.2.9 Case study 9 – Agency I

# 4.2.9.1 Background to the case study

I is based in the North of England and started in 199X as a branding agency, which moved into digital in 200X. The agency provides a combination of branding and digital marketing related services. At the end of 201X, it merged with another agency and is currently in the process of developing a new company name and brand. The number of employees has increased from 12 to 30. The agency has won several awards over the years, one of which was in 201X when the CEO received the 'female entrepreneur of the year' award for a particular region in the North of England.

# 4.2.9.2 Interview details and document review

One employee was interviewed, and details of the participant are presented in Table 4.17.

Agency	Participants	Position in the organisation
I	Participant 1	Founder and CEO
Table 4-17 Details of participant - Case study I		

A review of secondary source documents was carried out in addition to the interview to provide complementary and clarifying insight on the agency. These sources are listed in Table 4.18.

Document references	Documents
1i	Agency's website
2i	Companies House (company overview)
3i, 4i	Facebook and Twitter pages
5i, 6i, 7i, 8i ,9i	Local, regional and national press articles

Table 4-18 Secondary source documents reviewed - Case study I

This section highlights the findings of case study I with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

#### 4.2.9.3 Findings

#### 4.2.9.3.1 Nature of the innovation process

#### Flexible and a management process

Innovations carried out by agency I encompass internal processes that are developed and applied to resolve issues that arise in the organisation, and from learning from the industry, as pointed out by the participant:

"You know I went on a lean manufacturing tour about eight years ago and I just thought 'why can't we use the same design, this is brilliant' and that made us a better business"

The above comment highlights the lack of process in generating and adopting innovative internal practices, which directly rely on the decision of the CEO. The participant added that innovative ideas are occasionally developed using an informal R&D procedure; however, since this does not generate profits it remains a learning exercise. Therefore, the budget and free time given to innovate are allocated merely with regard to the development of innovative service solutions in response to client demand, which in some cases also result in products sold to a wider range of clients, as explained by the following comment:

"It's something that the client was struggling with internally but ... we realised there was an impact on the consumer and then actually by creating a product it provided better information to the consumers".

These service solutions are developed using several steps that includes a discovery stage, which entails understanding the problem of the client and the consequent requirements to resolve the issue. Research is then carried out to develop suitable ideas. Subsequently, a project management approach is applied that combines Prince 2 (Bentley, 2002). Prince 2 supports the organisation in the management of changes and resources development, and enables the involvement of clients. Activities, roles and responsibilities are identified and allocated to deliver the solutions and bring the projects to a close. The use of management processes is underlined on the agency's website (document 1i); it is aimed to give emphasis to their reliability in developing and delivering successful services. However, the

participant recognised the need for an Agile (Qumer, and Henderson-Sellers, 2006) approach where feedback can easily be collected to enable possible iterations. This methodology, which is used by organisations to familiarise and adapt to changes that happen in dynamic environment, is seen to be particularly suited to the digital marketing industry.

### 4.2.9.3.2 Characteristics of social, knowledge and structural capital

#### Individual connections

The participant mentioned that ties are established with other organisations as part of a professional network, which includes businesses from different industries in addition to digital marketing related businesses, as pointed out:

"So I regularly spend time out of the business with other businesses ... it's good to have a network you can call up if you need, so you know, for example, at the minute I am looking for funding and the first thing I did wasn't to ring the bank, it was to get in touch with three people who I know have been through that process and understand where they went to and how they did it, what they've learned".

These relationships are acknowledged as close and trusted when relating to the same gender and are developed over time. However, the above comment draws attention to individual ties, as opposed to organisational ties, which whilst being of benefit to the agency plays a more essential part on a personal level for the CEO.

#### Resources generation and when needed

Agency I has also established ties with other agencies, predominantly PR skilled agencies, that contribute to competences that are not available internally. These weak ties are characterised by occasional interactions based on a need basis with trust based on past experiences. Similarly, weak ties have also been established with software development organisations and specific specialists such as photographers.

#### Business and marketing

With regard to knowledge, the participant recognised the need for the senior management team to have an understanding of the commercial viability of the

agency. Therefore, it was also important to understand the activities and practices, and markets of their clients as well as customers to ensure that marketing messages are delivered efficiently. Knowledge of branding is believed to be elementary to their activities and therefore is viewed as necessary. The attention to branding is evidenced on social media (document 3i) where downloadable branding resources were made available. This knowledge and additional marketing related knowledge is shaped by training that employees complete internally and externally, which require being continuously motivated, as the participant highlighted:

"it's all about keeping the mind alert to new things, it's about constantly absorbing things and therefore understanding that things have to evolve and change over time. So, I think that continued culture of curiosity will naturally bring the innovation because as you learn more and see the gaps the needs more you're starting to develop ideas".

The above comment emphasises the relevance of knowledge that is acquired and generated individually by employees in the development of innovative outcomes. This argument is further strengthened by the attention that the agency gives to the practice of knowledge sharing to ensure that knowledge could be available across the organisation.

### Phased approach

The use of project management systems and practices by the agency implies the capture of data on clients, client interactions, and project related tasks. Systems and processes are also used to develop good communication with clients. For instance, the use of a CRM system with key accounts helps to manage interactions and to design and develop tailored plans and yearly objectives. This system is intentionally used to deepen and extend relationships with their clients and involves the performance of different activities, as stressed by the participant:

"We do that in lots of ways from small things like remembering their birthday through inviting them to training sessions and running workshops for them and going inside the business and doing factory tours and things like these through to social events as well". This implies a strategic purpose of developing deeper and wider relationships with clients, which is further reflected by the fact that the agency is in the process of developing a new role of Client's Relationship Director.

### 4.2.9.3.4 Implications for the innovation process

### • Strategic guidance

The use of systems enables the agency to perform time planning as well as resources and budget planning, which helps to strategically guide the activities carried out in the innovation process, as highlighted by the comment of the participant:

"Also, I think if we didn't have them putting the resource to innovation would be very, very difficult because you just wouldn't have the feel, the grasp of what capacity you've got and whether you can afford to put people onto it".

He explained that the planning allows the agency to see where additional focus and improvements are required. This increases the performance of the tasks and consequently the overall efficiency of the process is enhanced.

### 4.2.10 Case study 10 – Agency J

### 4.2.10.1 Background to the case study

J is a digital marketing agency located in London, which was established in 200X originally as a Pay Per Click (PPC) agency. It employs 16 people and has main expertise in Paid Search, Search Engine Optimisation (SEO) and online branding. In 201X, the agency was shortlisted for a European Award for their innovative campaign.

### 4.2.10.2 Interview details and document review

Two employees were interviewed and details of these participants are presented in Table 4.19.

Agency	Participants	Position in the organisation
J	Participant 1	Managing Director
J	Participant 2	Head of System Development
Table 4-19 Details of participants - Case study J		

A review of secondary source documents was carried out in addition to the interviews to provide complementary and clarifying insight on the agency. These sources are listed in Table 4.20:

Document references	Documents
1j	Agency's website
2j, 3j	Facebook and Twitter pages
4j	Process of service development (PDF)
Table 4-20 Secondary source documents reviewed - Case study J	

This section highlights the findings of case study J with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

# 4.2.10.3 Findings

# 4.2.10.3.1 Nature of the innovation process

# • Tailored and iterative

The Managing Director (Participant 1) highlighted that the agency has recently opened a new business branch specialising in consultancy. He explained that considering the potential within the market to compete with established consultancies develops organisational innovation. This is grounded on the unique proposition of real, practical (as opposed to theoretical) knowledge, whilst the explanation draws attention to the lack of a thorough innovation process.

The agency develops innovative service solutions for clients, which occasionally become internal processes, as highlighted by the Managing Director (Participant 1):

"So, for instance, we built forecast for a client based on a knowledge like a macro and so forth because we had the skill to work excel [Microsoft] then we basically innovated a new template that was then rolled out to every single office and it's like saved an hour of work every week for everybody else".

These internal innovations, which consist of reusing existing solutions in different contexts, do not follow any stages either and result from noticing opportunities and responding accordingly using the technical skills available in the agency.

The innovation of service solutions by the agency relates to search engine marketing (SEM). There is particular consideration for clients, which is reflected by the use of an iterative project management process tailored to their objectives that provides an easy access to the different stages of innovation, and collaborative work. This involves extensive communication and the reporting of data and analysis from the agency and at the clients' request. The initial phase of innovation (also highlighted in document 5j) entails an understanding of the clients' goals and the conduct of market research and benchmarking. Subsequently, an initial audit is completed prior to defining a suitable strategy. A second iterative phase related to the development and launch of the solution involves testing the performance of the solution, optimising the solution, and analysing the results and recommendations. The participatory nature of the innovation process was highlighted, as the Head of System Development (Participant 2) explained, in that employees are able to send any ideas that help design solutions, which are prioritised by the development team.

### 4.2.10.3.2 Characteristics of social, knowledge and structural capital

#### Resources generation

The agency has established relationships with recruitment specialists. These are ongoing ties that provide solutions to the particular needs of the agency, such as the need for foreign speakers and graduates, which are purposefully maintained for mutual benefits. The Managing Director (Participant 1) described the relationship as moderately close since recruitment specialists provide them with what they need. Interactions were described as frequent when required; however these are occasional the rest of the time. Furthermore, trust was explained as reliant on contractual agreements. The Managing Director (Participant 1) emphasised the weakness of the ties: "Recruiters are quite evil people. I sign [a] legal contract with them saying ... I've got exclusivity so they can't take my staff and put them somewhere else because they're basically head-hunters".

#### • Core and commercial benefits

Relationships are also been established with technology partners, which are referred to as the largest stakeholder with clients. The relationships with technology partners, such as Google, relate to their core activity and are therefore considered essential. Furthermore, the participant believed that being a Google certified agency intensifies this strength. However, whilst these strong ties are characterised by daily interactions there is evidence of a belief that interactions are not genuine and occur by obligation, as highlighted by the Head of System Development (Participant 2):

"We would do the minimum to work with them because you don't get any favours working more closely with Google or Twitter. There are no favours, unless you know someone in the hierarchy there ... we are sort of the frenemy to Google, and vice versa, but for me I would say more enemy

The agency explained that confidential information is exchanged with technology partners and there is confidence in their expertise. This indicates the presence of trust. However, trust is lacking with regard to their cooperation for it is described as being commercially motivated, as noted by the Head of System Development (Participant 2):

"It's all nonsense you know, they've come to the planet to save us from boredom and to make our life easier when in fact, they're just as greedy and media hungry as the rest of the people who've gone before them".

### Communication and data access

A large number of employees are dedicated to the servicing of clients, which evidences a strong focus on establishing solid relationships with clients. Relationships are seen to be close on the basis that clients are listened to and exchanges are numerous, which means that both the agency and the clients have wide access to data, as noted by the Managing Director (Participant 1):

"Then the clients share their own data and they have access to our technologies, they pay for analysis that we provide them and the only things that we only lock so the client doesn't understand it, it's the code of the technology".

This consideration of clients purposefully aims at providing transparency on practice and the delivering of ROI. Strong ties are characterised by frequent interactions, which are more continuous with larger clients due to greater needs. In some cases, ties are strengthened by a closeness that develops from carrying out similar digital activities, particularly in larger client organisations. The effort of the agency to be transparent, which provides clients with a better understanding of how their needs are answered, means that trust can develop.

### • Technical and professional development

Knowledge is deemed relevant to the agency, although the Managing Director (Participant 1) specified that the action of discerning the knowledge needed to develop successful service solutions is of greater importance. He added that in the agency knowledge could not be disassociated from people:

"People are knowledge, we have all the trading and everything put down into presentations; we have Wikis, and so forth but the real knowledge is given by the people who we hire".

The knowledge considered most relevant to the agency is technical, gained from professional certifications, and of management, that helps to motivate employees perform their best. Technical knowledge is viewed as providing advice to clients on their objectives and digital marketing budget. However, the Head of System Development (Participant 2) underlined the significance of understanding competitors and new technologies available in the market. The analytical nature of the agency is reflected in that knowledge is commonly gained by conducting collective analysis.

# • Internal focus

The agency captures some of its knowledge in internal based systems, such as Wikis. However, the Managing Director (Participant 1) stressed that the majority of knowledge is captured in employees through years of professional development:

"You could get everything on paper, that kind of stuff, but really you know people acquire knowledge through the fact they start at the bottom, they've learned that, they've done that task, it takes years to acquire knowledge so how to use excel properly and you know when to push the client and not to push."

Therefore, when employees leave the agency there is a need to ensure that new employees and new knowledge replace knowledge. Knowledge of past projects and clients are captured in PowerPoint presentations and notes. Technical knowledge is captured in organisational methodologies and approaches embedded in the culture of the agency used to develop digital solutions.

# • Informal and a management responsibility

The Managing Director (Participant 1) did not see the need to use specific processes to develop good communication with technology partners, as relationships are required. However, particular processes are used to develop good communication with clients, such as focusing on maintaining informal communication, and senior managers holding client accounts that enable a broader connection, which is viewed as an innovative configuration by the participant:

"I suppose if you talk about innovation our customer service structure is quite innovative, that we don't have account directors and they can call all the people who work on their account directly, yeah".

Contractual agreements are also identified as efficient processes that contribute to good relationship with clients.

# 4.2.10.3.4 Implications for the innovation process

# • Technical potential and efficiency

Both social and structural capitals have some implications for the process used to develop innovative service solutions. This is evidenced by the relationships with technology partners, who, through their direct support during projects and training sessions, provide technical resources and knowledge that enhance the technical quality of the final service solutions, hence reinforcing the technical potential of the overall process. Moreover, the methodologies that are embedded in the agency help to develop service solutions by using recurring approaches that are trustworthy and enhance the consistency and efficiency of the innovation process.

# 4.2.11 Case study 11 – Agency K

# 4.2.11.1 Background to the case study

K is a small agency of eighteen people based in the South West, which also operates in London. The agency, founded in 200X, specialises in brand development and communication strategies. Their services emphasise the building of brands, digital technology and creative design, as well as strategic planning. In 201X, the agency was a finalist at the XX Awards with regard to the creation of a client's website. In 201X, agency K was also shortlisted for the XX Awards granted to the best branding design. Furthermore, the increase of digital-based work in the agency led to the take over of the long established branding and design units by the digital team.

# 4.2.11.2 Interview details and document review

One employee was interviewed, and details of the participant are presented in Table 4.21.

Agency	Participants	Position in the organisation
K	Participant 1	Co-Founder and Managing Director
Table 4-21 Detail of participant - Case study K		

A review of secondary source documents was carried out in addition to the interview to provide complementary and clarifying insights on the agency. These sources are listed in Table 4.22.

Document references	Documents
1k	Agency's website
2k	Companies House (company overview)
3k, 4k	Facebook and Twitter pages
5k	Directory
6k	National press

Table 4-22 Secondary source documents reviewed - Case study K

This section highlights the findings of case study K with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

# 4.2.11.3 Findings

# 4.2.11.3.1 Nature of the innovation process

### • Participatory

Agency K carries out innovative service solutions aimed at resolving client issues. In addition to being unique to clients these innovations occasionally seek to be unique to the industry in order to strengthen the reputation of the agency and to upstage competitors. The Managing Director explained that the agency develops innovative solutions by first understanding the requirements of the client included in the project brief and subsequently further understanding the client and its industry prior to developing and implementing a solution. He added that attention is given to time management at each stage of the process and to participation across the whole process. The participatory facet of the method was evidenced by the following comment:

"It goes through different stages but it's a case of taking what the client wants but then try to come up with something that is suitable to the brief and get the client on board there but also just going though different stages and making sure that the team is involved every time".

#### 4.2.11.3.2 Characteristics of social, knowledge and structural capital

#### • Expertise

Agency K has established close relationships with clients, which are viewed as their main connections in the task environment. These strong and trusted ties are based on frequent interactions and an understanding from clients that the agency has the appropriate expertise.

#### • Resources generation and behaviour

Relationships have also been established with other agencies with whom agency K has interacted at conferences and networking events. Sporadically, projects require additional skills, and therefore joint work is performed with agencies that provide complementary skills to avoid direct competition. These relationships are described as distant, as the Managing Director explained, agencies are not reliant on each other for they provide similar services and there is a constant possibility of competition. Nonetheless, there was a perception that competitors are closer than in other industry, as highlighted by the participant:

"The industry is very open and we do work with competitors. We do work quite closely in a certain way, you know. There are events where we all attend together around and we share information between each other, you know, we work collaboratively but you know there are other agencies, competitors and we are fighting for work so you know it is competitive".

However, interactions are occasional, approximately three times a year, at networking events and conferences, and exchanges relate to generic information, as opposed to confidential. This indicates that ties are weak. Trust is based on a common understanding of good competing behaviour although, the participant underlined that this behaviour fluctuates when pitches are performed to win new clients.

### • Support and dependency

In contrast, agency K develops close relationships with technology partners who provide them with technical support and help them to deliver serviced solutions to clients. These strong ties are based on weekly interactions and on the trust that the

agency has in the competencies and expertise of the partners. The support given by the technology partners is described in the following comment:

"I work closely with Google (..) so they provide me with help when we've got a new prospect and I need to look at some general stats on Google for that business, or they help me looking over at my Google account and give me some advice and tips and provide help if we need extra resources, that kind of thing, so that kind of relationship is very supportive".

The above comment draws attention to the fact that the closeness of relationships is strengthened by the mutual benefits that they provide. For instance, in exchange for their technical support, the agency is reliant on Google data to understand and assist their clients.

# Technical knowledge

With regard to knowledge, the agency recognises that understanding the latest digital technologies is significant for it helps to perform their core activities. This knowledge needs to be up-to-date due to the fast, changing digital industry and is consequently sourced from the newest blogs and online sources; hence, employees are able to enhance their technical knowledge. The relevance of technical knowledge was highly referenced on the agency's social media (document 3k and 4k), which was extensively made available, and also by the participant:

"... the number one thing would be you know having people with the knowledge to do that but also, it's being reliant to make sure that we're up to date on what's going on and making sure that we're all aware of the latest technology that's out there on the market; without that information then it's hard to come up with things".

# • Software and Internet based

There is a strong focus from the agency on the use of systems, such as time management, that helps to improve the internal efficiency of the organisation. Additionally, applications, such as Slack, are used to allow fast sharing across teams and with clients. However, the Managing Director recognised that a large amount of knowledge is captured in people. This was described as problematic since it creates a reliance on specific employees for particular knowledge and to undertake particular tasks. Furthermore, knowledge of industries is not stored internally but consists of sharing of online sources. The agency uses a CRM system to ensure good

communication with clients; however its use is limited for there is a preference for traditional methods such as emails, phone and unplanned communication.

# 4.2.11.3.3 Implications for the innovation process

# • Technical potential

There is evidence of the implication of knowledge capital for the innovation process in the agency since an up-to-date understanding of technology and technical processes contributes to the design and development of enhanced technical service solutions, and therefore increases the technical potential of the process.

# 4.2.12 Case study 12 – Agency L

# 4.2.12.1 Background to the case study

L is a London based digital marketing agency that specialises in brand development and corporate communication. Their services focuses on brand storytelling and internal and external communication campaigns using design, illustration and animation. Established in 201X, L employs ten people. In 201X, the agency was nominated for the creative and brand contest of the International XX Awards. In 201X, it established a partnership with a multi-agency group in South America, which allowed their services to be promoted across the country and South American continent.

# 4.2.12.2 Interview details and document review

One employee was interviewed, and details of the participant are presented in Table 4.23.

Agency	Participants	Position in the organisation
L	Participant 1	Co-Founder and Managing Director
Table 4-23 Details of participant - Case study L		

A review of secondary source documents was carried out in addition to the interview to provide complementary and clarifying insights on the agency. These sources are listed in Table 4.24.

Document references	Documents
11	Agency's website
21	Companies House (company overview)
31, 41	Facebook and Twitter pages
51	Video animation
61	Organisational guideline on deadline (PDF)
71	Organisational service animation process (PDF)
81, 91	Video animations
101	Award nomination

Table 4-24 Secondary source documents reviewed - Case study L

This section highlights the findings of case study L with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

# 4.2.12.3 Findings

### 4.2.12.3.1 Nature of the innovation process

### • A thorough procedure and iterative

Agency L specialises in digital animation, which means that their innovation consists particularly in using new technology and developing innovative animated contents in their clients' service. The agency is increasingly investing in R&D to internally develop such innovations and they are finding that particular clients are prepared to adopt them. The Managing Director stressed that the reason for an internal approach to development was due to the difficulty in demonstrating ROI to clients in addition to clients being risk averse. The following comment presented an example of technology that the agency has recently worked on:

"So over a year we invest in house projects that are self-funded to test new innovations, sometimes it's about a new VR thing, sometimes it's about doing a new form of content that we think will be good ... We wanted basically to do an experiment with 360 degree imagery so we created that Christmas Card".

The small size of the agency is favourable to a participative approach to innovation, as innovation does not require a solid method. The participant pointed this out:

"To be honest, for us we are so small that (..) it's constant and it's embedded in the way we do things. I don't have an appointed R&D person and stuff like that because, literally somebody can stand up and walk and ask why do we do this? ... this is one of our values, there is no process, innovation is what we do all the time".

However, the procedure to develop innovative service solutions consists of a preliminary meeting to understand the requirements of clients and seeks potential suitable solutions. Templates are subsequently designed and completed by clients with their content requirement. Three different designs are presented, from which one is chosen and validated. A first draft is developed and three successive amendments are offered before the final approval. Once the solution is fully developed, final feedback is sought with the possibility of minor amendments. These stages highlight a thorough procedure to the development of innovative service solutions. This thorough practice is also evidenced in the documented service animation process and guidelines on deadlines developed by the agency (document 8I and 9I). The comment made by the participant further stressed the cyclical nature of the process:

"And that's a really not destructive one it's definitely an iterative process where you do little steps and see what happens, you know".

### 4.2.12.3.2 Characteristics of social, knowledge and structural capital

#### • Ethos and expertise

The participant explained that relationships with clients are fundamental to the operation of the agency. Consequently, substantial effort large effort is placed on developing strong ties through frequent communication. There is indication that trust from clients relies on the expertise of the agency to deliver the expected solutions, as noted by the participant:

"I remember once we did this some work for a mobile company and they asked 'have you ever done anything in Talko? It was like 'no, but we've done things for Samsung', they just wanted a bit or reassurance you know". However, there is recognition that holding a similar set of attitudes is essential to further develop trust with clients and it is occasionally considered to be more important than expertise. This indicates the significance of organisational culture in developing trust in addition to expertise and work related experiences.

#### Recommendation and resources generation

Along with clients, the agency develops ties with freelancers and technology partners. Trust with freelancers is based on past working behaviours and the quality of work delivered. Freelancers are essentially selected through recommendations, which means that trust is strengthened. Strong and trusted ties with technology partners are based on the positive reputational benefits that the relationship generates in terms of reputation for the agency, as highlighted in the following comment:

"I work with Google as a mentor for Google Launchpad and you know that makes me an authority in that field as an individual and the company gets positive outcome because, as an MD, I go and give [a] talk to Google. So it's about keeping relationships".

### • Up to date and technical

The Managing Director explained that having a constant and up to date understanding of the digital marketing industry and of the latest digital technology is necessary due to the fast changing nature of the industry. This explains the strong focus on the knowledge acquired from online sources and from attending external events, which were viewed as key organisational practices. The extensive references of digital events and trainings across the UK are further highlighted in their social media (document 3I and 4I).

### • Physical and internal focus

Most of the knowledge of the agency is captured in people; whilst systems are used to capture communication from clients; these are predominantly applied to the sharing of information across the agency, as highlighted by the participant: "If there was an article on the latest thing going on in digital marketing then we would share that article with the staff and communicate that and things like that so we can keep up to date".

The above comment stresses that the main focus of systems and practices is on internal communication in contrast to capturing knowledge. With regard to establishing good communication with the task environment, the agency seeks to enhance interactions with clients using a CRM system. Meanwhile, the participant acknowledged that other connections have not been considered.

### 4.2.12.3.4 Implications for the innovation process

### • Technical and creative potential

The social and structural capitals of the agency have some implications for the innovation process. For instance, there is an indication that ties with both technology partners and freelancers contribute to the provision of skills and specialisms that are fundamental to the development of innovative solutions. As a result, this enhances the technical and creative potential of the process.

### • Efficiency

Furthermore, the use of systems, such as online timesheets, help teams with time management and the use of applications, such as Slack, enable easy and simultaneous clarification of clients' requirements. These help to ensure that solutions are delivered on time where several projects are carried out, which enhances the overall efficiency of the innovation process.

# 4.2.13 Case study 13 – Agency M

### 4.2.13.1 Background to the case study

Agency M is a full service digital marketing agency that specialises in website design and marketing. Their services include SEO, PPC conversion analysis, and content and email marketing, and social media services. The agency, which employs 16 people, is located in the South West of England and has an office in London. In 201X, the agency was a finalist at a recognised digital award for innovation, and in 201X, it was voted the best place to work in an international independent business award programme.

# 4.2.13.2 Interview details and document review

One employee was interviewed, and details of the participant are presented Table 4.25.

Agency	Participants	Position in the organisation	
Μ	Participant 1	Founder and Managing Director	
Table 4-25 Details of participant - Case study M			

A review of secondary source documents was carried out in addition to the interview to provide complementary and clarifying insight on the agency. These sources are listed in Table 4.26.

Document references	Documents
1m	Agency's website
2m	Companies House (company overview)
3m	YouTube (promotional video)
4m, 5m	Facebook and Twitter pages
6m	Case study
7m	Local press

Table 4-26 Secondary source documents reviewed - Case study M

This section highlights the findings of case study M with regard to the nature of their innovation process and the characteristics of social, knowledge and structural capital in, and with regard to, the implication of the capitals on the innovation process.

# 4.2.13.3 Findings

# 4.2.13.3.1 Nature of the innovation process

### Client focused

Agency M carries out innovations that are characterised as offerings of perspectives distinctive to the requirement of clients. These innovative service solutions involve the improvement of existing services, which results in innovations for their clients, as pointed out by the Managing Director:

"So with our clients we started using Google AdWords and scripts, which was to make some adjustments without having to manually do them, which is fairly innovative".

To develop the services, the agency first completes an exploration of their client's organisation to understand their activity, services and products, and customers. Based on this understanding, ideas and strategies are developed and communicated to the client for approval. Subsequently, a creation stage includes the development of ideas into marketing messages and campaigns, which are implemented throughout different channels and disseminated to the targeted audience. A review process is carried out following the delivery. There is some indication of the close attention given to understanding clients in their process, which is highlighted in the following comment:

"it's a combination, as I said before, of reading about new advances in the industry through blogs, through webinars and going to events and having some sharp people internally to listen to a client, to understand what it is their business problem is ... or what the client currently does ... and use that sort of background knowledge and understanding of what's possible".

Additionally, the innovation of internal processes is carried out by the agency with the aim of enhancing their internal efficiency and subsequently, their offerings to clients. These follow an organic approach, as highlighted by the participant:

"So it's applying a bit of business understanding and knowledge and technology, sticking all together and delivering something that saves us time and makes the client ultimately hopefully more profitable than what they would be if we did things the old ways".

### 4.2.13.3.2 Characteristics of social, knowledge and structural capital

#### Contractual and competition

Agency M develops relationships with other digital marketing agencies with which they have worked with on specific projects offering and receiving complementary skills. These are contractual relationships; however, the Managing Director recognises the potential benefits of developing longer-term relationships where joint work can be undertaken. Furthermore, he recognises that the agency is not focused on developing ties with other organisations in the task environment due to their lack of commercial mindedness and a lack of mutual benefits. However, there is evidence that establishing additional ties is needed, as noted:

"We don't really interact with universities; there are there but they're not particularly proactive in terms of coming up with ideas or wanting to help us ... I think up to now we've just been doing lots of things direct with clients and not in partnership with that many people today...This year, there will be certainly a different approach we are going to take".

Agencies of similar service offerings are described as distant connections whilst agencies with distinctive offerings are viewed as closer. Nonetheless, ties with both are limited, as indicated by their limited interaction, such as once a year and every few months, respectively. The Managing Director mentioned that developing stronger, longer term and mutually beneficial relationships require the former establishment of trust, which is pragmatically difficult due to the competitive nature of the industry.

#### Past experiences and expertise

Agency M also develops close relationships with clients. The participant explained that closeness is grounded on past experiences. The emphasis of closeness with clients through involvement in projects is reflected in their promotional materials and case studies (documents 3m, 4m and 6m). Closer ties are reliant on personal and individual connection, as highlighted by their comment:

"one of my best clients, she has two children and takes them back to my house so we can talk about similar things at work and some other things outside of work and ultimately we keep delivering for you, that makes her good at her job, keep them happy and if she moved to another company she would take us with her".

The key element of trust is based on the recognition and acceptance from clients that the agency is competent to deliver the work. Based on the following comment, it was evidenced that time is also required in the forging of trust: "Again, it is a similar thing to partners, if they are good clients they will listen to you, they trust you through the thing that you say, the way you behave, the actions that you do, the results that you get to them that will build trust over months or ideally years".

### Technical knowledge and online systems

Knowledge was described by the Managing Director as the expertise available in the agency relating to the technical know-how that is used to provide solutions to particular problems raised by clients. This characterisation agrees with that of the participant where knowledge is predominantly captured in blogs written by employees and on the agency website, which are considered major knowledge containers. The participant added that a large amount of knowledge is captured in messages exchanged internally, which draws attention to internal sharing practices as obvious external containers of the knowledge held by employees.

#### • Organic and management responsibility

No system is used to develop good communication with the task environment, as communication was described as organic. However, the participant explained that it is his concern as a founder and Managing Director to keep communicating with clients, as highlighted in his comment:

"People like myself who is a bit more senior or with invested interest in the business thing, well will make maybe a calendar note every six months or three months to give certain clients a call or meet them but that's as far as it would go".

This means that the responsibility of developing long-term relationships with clients remains with the Managing Director. The participant explained that the use and formalisation of systems and practices in the development of innovative services solutions is difficult due to the constant changes made by technology partners such as Google and Facebook, which are the principal operators and providers of digital technology platforms.

### 4.2.13.3.3 Implications for the innovation process

• Two-way interaction

Social capital has particular implications for the innovation process. Ties with clients provide regular impute and feedback throughout projects, and constant project updates from the agency, which results in a two-way participatory innovation process.

# 4.2.14 Summary and key themes of the 13 cases

This section summarises the innovation outcomes and innovation process identified in each case studied, as well as the characteristics of the social, knowledge and structural capital (in Table 4.27 and Table 4.28), and the implications of these capitals on innovation processes (Table 4.29).

Case	Innovations outcomes	Innovation process
A	Internal process; service delivery process; service solutions	Process used for development of service solutions: Briefing sessions, Understanding the customers/Development of customer profiles; understanding clients; research of ideas, design; development, validation and implementation
В	Organisational innovations (new unit); service solutions	Process used for development of service solutions: Demand from client; Discuss the project across the organisation; brainstorming of ideas across teams and organisation; design and development of technology
C	Internal processes; products; service solutions	Process used for development of service solutions: Clarification of project specifications and requirements; design and development; testing and implementation; support
D	Internal processes; products; service solutions	Innovation lab (FinTech) innovation process; Process used for development of service solutions: Demand from clients and acknowledgement of the brief; understanding of target market (client, competitors); experience and past projects; design and development; delivery; review of project
E	Internal processes; service solutions	Process used for development of service solutions: Understanding of the project; design; sign off; development; sign off; implementation; review of the project
F	Organisational innovations; service solutions	R&D process used for organisational innovations: awareness of issue, research and analysis of the issue, development.

		Process used for development of service solutions:
		Exploration of clients' requirements; understanding of the market; generation of ideas; development of ideas; delivery of solutions; regular checks
G	Internal processes; service	Process used for development of service solutions:
	Solutions	Kick off meetings, framing of projects; design (front end and development team); feedback from clients; building of solutions; post project review
Н	Service solutions; service delivery processes	Process used for development of service solutions:
		Brief; understanding of market and requirement, existing and potential customers; brainstorming of ideas; design of ideas; building and delivery; review
I	Internal processes; Service	Process used for development of service solutions:
		Discovery stage: understanding problems of clients and requirements, research of suitable ideas; Project management stage: allocation of roles, activities and responsibilities, delivery of solutions and closure of project
J	Organisational innovation;	Process used for development of service solutions:
	Service solutions	Initial phase: Understanding goals of clients, market research and benchmarking; audit and definition of strategy; Iterative phase: Development and launch, testing of performance and optimisation; analysis of results and recommendations
К	Service solutions	Process used for development of service solutions:
		Brief and understanding of clients; development; implementation of solutions
L	Internal processes; Service solutions	Process used for development of service solutions:
		Initial stage: Preliminary meeting to understand requirement and potential solutions; Design stage: clients give ideas on contents; design is approved; amendments; final approval; Development stage: solution is developed; final feedback; minor amendments. Implementation
м	Internal processes; Service solutions	Process used for development of service solutions:
		Exploration of clients' organisation; development of strategies; creation and development of ideas; implementation; review process

Table 4-27 Characteristics of the innovation process in each case study (Source: Author)

Case	Social Capital	Knowledge	Structural capital
	Structural and relational	Type of knowledge	Systems and practices
A	Strong ties and trust: with clients	Educational qualification	Capture of knowledge:
	Weak ties and low trust: with other digital marketing agencies; recruitment specialists	Certification from technology partners	Knowledge captured in employees;
		Understanding of technological	Knowledge captured in best practices
		Implicatione	Developing good communication:
			Use of social media and marketing based processes (i.e.: promotional emails)
			The clients service department communicates with clients
В	Strong and trusted ties with third party providers	Business knowledge	Capture of knowledge:
	(preferred providers network)	Creative and technical experiential digital	Use of process to capture knowledge. Knowledge
	Strong and trusted ties with clients. Although depends	marketing knowledge	timesheet
	on personality, culture and size or organisation.		Most of the knowledge is captured in employees
С	Strong and trusted ties with clients	Experiential knowledge	Capture of knowledge:
	Weak ties with clients' partners. Trust is contractual	Educational knowledge	External based sources of knowledge
		Commercial and operational knowledge	Knowledge captured in web based applications (i.e.: Google
		Organisational knowledge enabled by	Docs)
		knowledge diversity	Knowledge captured in employees that relied on internal sharing practices
D	Weak ties with other digital marketing agencies. Trust is contractual Strong and trusted ties with clients	Creative marketing	Capture of knowledge:
		Market knowledge	Knowledge captured in physical assets (i.e.: Website coding,
		Organisational	campaigns)
Weak ties with university (recruitment schemes) and	Weak ties with university (recruitment schemes) and	knowledge enabled by diversity of knowledge	Knowledge captured in employees
	trade publications. Lack of trust		Business related knowledge captured in account and project management software

	Strong and trusted ties with technology partners (i.e.: Google)		Technical and creative knowledge is less captured <b>Developing good</b> <b>communication:</b> The clients service department communicates with clients
E	Strong and trusted ties with clients Weak ties with partnering organisations and universities (ties in development). Lack of trust.	Knowledge of their operating markets Technical digital knowledge Lack of organisational knowledge	Capture of knowledge: SO 9001 accreditation: Knowledge of projects, review of projects clients communication, knowledge of markets captured in systems Technical knowledge captured in few employees Developing good communication: The clients service department communicates with clients
F	Strong and trusted ties with clients Strong and trusted ties with technology partners (i.e.: Google) Weak ties with freelancers. Trust is based on NDAs	Technical and creative digital marketing knowledge Online and experiential knowledge	Capture of knowledge: Technical knowledge captured in technical guides (step by step helpers), informative blogs and case studies, website Developing good communication: Regular update to clients and technology partners, informal interaction with technology partners
G	Strong and trusted ties with clients Weak ties with lack of trust with other digital marketing agencies	Technical digital marketing knowledge Online, experiential and educational knowledge Organisational knowledge enabled by diversity of knowledge	Capture of knowledge: CRM and Web based applications (Google Docs, Slack) to capture technical and client knowledge Developing good communication: No clients service department to enable to whole organisation interacts with clients Small client base to emphasise relationships

			Use of systems such as Slack to communicate and share information
Н	Strong and trusted ties with clients Strong and trusted ties with partnering agencies	Creative and technical digital marketing knowledge	Capture of knowledge:
			Senior Management team
		Collective knowledge through collaborative learning	Web based application (Google Docs) to capture technical processes and technological knowledge
			Routines and methodology; open source projects
			Developing good communication:
			Interaction of the whole agency with clients
			Regular communication during projects, follow up and reporting
			Use of Intranet
I	Weak ties with lack of trust with other digital marketing agencies	Business knowledge	Capture of knowledge:
		Knowledge of client (business, industry, practices and approaches)	Project management systems (Synergist)
			Developing good communication:
		Knowledge of customers	Use of CRM for client
		Creative and technical	communication
		knowledge	Yearly plan and activities with clients
		Individual knowledge	
J	Weak ties with lack of trust with recruitment specialists Strong trusted ties with technology partners (i.e.: Google) Strong and trusted ties with clients	Technical experiential digital marketing knowledge Organisational knowledge through collective analysis	Capture of knowledge:
			Technical knowledge captured in employees
			Technical knowledge captured in methodologies
			Power Point presentations
			Developing good communication:
			Purposeful use of informal communication with clients and accounts held by senior

			managers
К	Strong and trusted ties with clients Weak ties with lack of trust with other digital marketing agencies	Technical and up to date digital marketing knowledge	Capture of knowledge: Knowledge captured in employees Developing good communication: Use of CRM for client communication
L	Strong and trusted ties with clients Weak ties and trusted ties with freelancers Strong and trusted ties with technology partners	Up to date knowledge of digital marketing industry	Capture of knowledge: Knowledge captured in employees Communication captured in Web based applications (i.e.: Slack) Developing good communication: Use of CRM for client communication
Μ	Strong and trusted ties with clients Weak ties with lack of trust with other digital marketing agencies	Technical individual and experiential knowledge	Capture of knowledge: Knowledge captured in employees Knowledge captured in blogs and website Internal messaging Developing good communication: Efforts from senior management to remain in communication with clients

Table 4-28 Key characteristics of innovation process, and social, knowledge and structural capital in each case study (Source: Author)

Case	Implications of social, knowledge and structural capital on the innovation process
A	<ul> <li>Social capital: New learning from ties is used internally and has led to the reliance of process their process on internal based knowledge.</li> <li>Structural capital: Weekly planning of tasks which leads to a less chaotic and more</li> </ul>
	efficient development of innovative service solutions.
В	<b>Social capital</b> : Third party providers innovating on behalf of the agency and their process is therefore directly reliant on external sources.

	<b>Structural capital</b> : Some procedures help provide an overall focus of innovation process. These procedures need to be flexible and adaptable.
С	<b>Knowledge capital:</b> Knowledge of competitors, suppliers and industry helps to understand at who and where the solutions are aimed, which enhances the consistency of the process.
	Technical knowledge allows time tracking and planning that results in a faster and more efficient process
	<b>Structural capital</b> : Systems (i.e.: Google Docs, Trello) enable communication with clients during the project creating a two-way interactive process.
D	<b>Social capital:</b> Demands from clients influence the design and development stages of the process in terms of the required resources.
	The support and up to date knowledge from technology partners strengthens the technical potential of the process to develop technically enhanced service solutions.
E	<b>Knowledge capital:</b> Knowledge provided by clients helps to identify the requirements and needs of market, which shapes the design and development activities of the process and enables the agency to develop tailored service solutions.
	Lack of technical knowledge across the agency limits the sharing of ideas throughout the process. This reduces the flexibility of the process.
F	<b>Knowledge capital:</b> Technical specialism and support from freelancers and technology partners reinforces the technical potential of the innovation process allowing the agency to deliver technically enhanced solutions.
	<b>Structural capital:</b> The capture of technical knowledge through systems allows knowledge to be retrieved for future service solutions, which therefore enhances the reliance of the innovation process on internal knowledge.
G	<b>Social capital:</b> Ties with other agencies conveys new ideas and ways of working that are used and adapted in innovative service solutions. The process relies on the further internal generation of ideas.
	Comments made by clients in PPR enable activities to be amended in the process. Therefore, the process can be improved.
Н	<b>Social capital:</b> Trusted ties with clients allows the agency to be further proactive in contributing to the ideas, design and development of service solutions.
	<b>Structural capital:</b> The use of systems and processes enables tasks in the innovation process to be completed on time, which enhances the quality of the service solutions, and consequently the efficiency of the process, whilst leading to higher productivity and higher profitability.
1	<b>Structural capital:</b> The use of systems for the planning of time, resources and budget helps to guide the activities in the process and as result increases the performance of the tasks and the overall efficiency of the process.
J	<b>Social capital:</b> Relationships with technology partners, through direct support during projects and training sessions provide technical resources and knowledge that enhances the technical quality of the service solutions, which reinforces the technical potential of the process.

	<b>Structural capital:</b> The methodologies embedded in the agency help to develop service solutions using trustworthy recurring approaches, which enhance the consistency and efficiency of the innovation process
К	<b>Knowledge capital:</b> An up to date understanding of technology and technical processes contribute to the design and development of enhanced technical service solutions, which increases the technical potential of the process.
L	<b>Social capital:</b> Relationships with technology partners and freelancers contribute to skills and specialisms that are key to developing innovative solutions, which result in enhancing the technical and creative potential of the innovation process.
	<b>Structural capital:</b> The use of systems and applications (i.e.: online timesheets, Slack) help with time management and the clarification of client requirements, which ensure that solutions are delivered on time resulting in an overall efficiency of the innovation process.
М	<b>Social capital</b> : Strong ties with clients contribute to providing regular imputes and feedback throughout the process, which, with the constant project updates communicated by the agency, result in a two-way participatory innovation process.

Table 4-29 Key implications of social, knowledge and structural capital for the innovation process in each case study (Source: Author)

# 4.3 Cross case analysis

# 4.3.1 The context of the UK digital marketing industry

Three main patterns were identified with regard to the characteristics of the UK digital marketing industry. These patterns are: that the industry is highly competitive, it is changing fast and location is important.

# • A competitive industry

All cases referred to the industry as very competitive due to the high number of agencies that operate in the market, with London considered particularly competitive. However, the city benefits from a larger client base, which means additional business opportunities. Whilst competition outside London exists, the level is considered reasonable and the atmosphere is described as good-natured given that people are likely to know each other. There is also a collective attitude, which is not acknowledged with agencies located in London, as highlighted in the following comment:

Participant 10: "...There is a good community feel and competition is good as well, there is a good level of it, we get on and do things together."

Competition has negative and positive effects; in addition to negatively affecting the retention of clients, prices are lower, which results in smaller margins. Furthermore, the arrival of many new agencies means that there has been an increase in lower quality of work across the industry, as explained in this comment:

Participant 8: "There's a lot of people coming into the agency world. Every man and a dog who can use Facebook is becoming a digital expert now so it's becoming very competitive but not necessarily from quality perspectives, very much price focused."

Thus, many agencies are compelled to give further attention to client retainer agreements to ensure regular revenues. However, for a few agencies competition is considered positive for it provides opportunities to further define their offerings.

Participant 1: "It can help to push you down in one avenue rather than another, because it might be that there's a company ... who are exceptionally strong in one area so we want to focus on another one, because we know they are not very good in it."

Moreover, competition provides opportunities to work in partnership within specific markets, as explained in the following comment:

Participant 8: "We found that sometimes people we thought we would be a competitor with or we know could be a competitor we might make an offer or they might make an offer to us and we make a stronger application together."

Therefore, there is evidence that the majority of agencies need to adopt different orientations by either emphasising the quality of service, delivering integrated services, targeting larger strategic projects, or specialising in one particular sector and/or region.

### • A fast changing industry

There are positive economic signs as a few agencies see higher spending from clients and although the consequences of Brexit were not completely known these are expected to be positive since, according to agency D, businesses are always going to require marketing services. Nonetheless, the industry is constantly and

rapidly evolving, which results in demanding challenges; one such challenge is the requirement to keep up with the rest of the market.

Participant 9: "One of the most difficult things is that the companies we rely on for our industries, the Google, the Facebook the Twitter, don't tend to announce their plans they just release new products, which can be difficult for us in the industry".

Different trends and changes in the industry are identified, such as the use of mobile devices to communicate, the use of analytics, real-time transactions and interactions, the integration of different media channels in marketing campaigns and the growing demand for online shopping. However, the majority of agencies refer to the need to show ROI and additional transparency to clients as the biggest transformation in the industry. The increasing role in organisations over the past few years highlights that digital marketing is a relatively established industry.

The increased focus and reliance on media channels such as Google and Facebook, are viewed by several agencies as having a negative impact on the industry by reducing creative talent, which impoverishes the concept of marketing. Moreover, changes with regard to clients are also occurring for they are experienced as: increasingly knowledgeable, better organised with regard to digital technology, and gradually developing their in-house capabilities. Nevertheless, they are not yet considered to be entirely ready to embrace digital technology and are still reliant on agency.

Participant 12: "I have seen a lot of differences in the way our customers operate. Particularly big businesses are getting smarter and better at recruiting digital people within their own doors; they are getting better at working and collaborating with companies like ours".

This means that agencies are required to give further attention to the provision of value-added services and progress into partnership work with clients.

### The relevance of location

Being located in larger cities makes it easier to recruit employees, which has prompted several agencies to relocate to large bordering cities. Agency B is still debating the possibility of doing so. Whilst the issue of location is being addressed, the recruitment of technical skills remains a particular issue common to many agencies. Participant 10 highlighted this issue:

"We know that everyone struggles for development recruitment; it's hard to find really good developers. Company X opened here and basically they have put a massive package out for developers and took the whole pool of developers."

This lack of technical skills implies the need to find alternative solutions. Agency C for instance, relies on several technical developers who are based across the UK and internationally; this approach allows the work to be completed by known and trusted employees whilst enhancing job satisfaction, as employees do not need to relocate.

Client location was not seen as a particular issue since the majority of agencies located outside London have a rented or fully staffed London office. This provides them with access to larger clients in addition to clients in their local area.

Participant 1: "the majority of our big clients and big brands are not based in X. They're based in London, down south, ... so we do have to go probably outside X to get the level of clients we are looking for."

Thus, small digital marketing agencies located outside London also contribute to the competition of the London market. However, the smallest agencies located outside London are not drawn to relate or interact with the London market, and instead work with locally based clients. This is the case for agency F (Participant 8):

"London is a massive market but at the same time it does come with its own headaches. Transportation costs, much higher expectations, significantly higher - it's not just a notch job. For us as a business it's just not right for what we want to do at the time being."

### 4.3.2 Nature of the innovation process

Many participants do not view their agency as technology innovators but as users of new and existing technologies on which innovative service concepts and service
delivery systems can be developed. These innovative developments are either new to their clients, their markets or to the agency concerned. Whereas agencies recognise innovation as something radical and groundbreaking in the majority of such businesses, innovation consists of the on-going evolution and iterative improvement of services. Participant 8 highlighted this:

"So, innovation in terms of what we do, the day-to-day stuff we are continuously improving, it is not necessarily innovation but we are continually improving whatever we're doing, whether that is implementing new technologies, testing them for different clients and different projects."

#### A client led development of services

The innovations performed in agencies are commonly clients-led, which means that they are engendered as a result of the demands made by clients to resolve particular problems. This implies the need to be creative and generate new ideas to develop innovative bespoke tangible concepts that provide new experiences to clients and users with the aim of enhancing sales. Bespoke service concepts are predominantly known as projects and entail working collaboratively with clients throughout a period of time. For various participants, innovative service concepts refer to the production of a new creative service concept, while for others it focuses on the use of new or existing technology platforms, and new technical tools and features, as highlighted in the following comments:

Participant 1: "In light of design for websites or the development of websites, obviously we're focused on things like the speed in which websites load, so it's going to need to be very innovative there, in terms of the coding element to it and making sure that things work faster."

Participant 11 "we try [to] innovate the way we can and use animations and [the] latest technology to make sure that the we create exciting new things through that channel rather than old kind of static stuff."

The above comments reflect the underlying and core nature of the agencies as technology-minded, content-minded, or both in some cases. All agencies mentioned

that their innovative service concept result from and within a process they use to develop new services in response to the demand of their clients:

Participant 11: "Innovation kind of comes naturally within what we do. I wouldn't say it's very different from services and it would always be linked to something we're already doing so be [it] some client's work we're doing some internal project that we've got going on. We don't see it as separate activity".

### • Three core stages

The majority did not refer to this as an innovation process, and this was based on two recurring reasons, which were firstly, that the agency is too small, and secondly, that they do not have a culture to implement such processes. However, the above comment from Participant 11 shows that innovation and new service development are embedded and encompassed in the same process. Agencies use different processes, however these follow a similar pattern that is found to include three main stages.

### 1. An induction stage:

In the first stage, the agencies were inducted to the project. Responding to specific issues from clients require them to have an understanding of the brand, and a frame for the project in order to assimilate the work needed based on the brief. This involves an initial briefing meeting with clients and a deeper exploration of their requirements. Subsequently, insights are gathered to gain an understanding of the market, competitors, client audiences, and the most up-to-date digital technology. The focus on gathering this understanding was pointed out by Participant 8:

Participant 8: "If you're not aware of how the market is changing within your own industry, you are missing the point because you can't innovate if you don't know what's possible and if you don't know what you can do differently".

#### • Understanding of customers

Past experiences and previous projects are used to reinforce their understanding in addition to communicating with clients, engaging directly with customers, holding focus groups, and using secondary sources. There is an acknowledgment of the relevance of understanding customers with the extended practice of creating customer profiles to support the design of new service concepts as well as supporting future designs:

Participant 1: "... We need to understand who the customer is, who it is that we try to talk to, whether it is via Facebook, Instagram, LinkedIn, whether it is via Google, we need to understand who that person is that we try to reach...".

## 2. An expansion stage:

In the second stage, tasks and responsibilities are generally assigned and work is scheduled. Collaboration between the different teams is acknowledged as particularly key to efficiently carry out all the different activities of this and the subsequent stages of the process. New ideas are generated and fed into the design of service concepts.

### • A participatory development

These are created, shared and discussed in sessions that include the specifically selected working team, or discussed organically across the whole agency. Participant 3 provides an example where sessions were made widely accessible to the whole agency:

Participant 3: "... shortly after the brief is written we all get together and we discuss the job or the project, so that's a project-based way of engaging with different departments. So it may well be a print campaign that's been asked for but equally, someone in digital might challenge why it needs to be done in print, so we have an open forum for that".

Occasionally, ideas generated by staff members outside the process are fed back into the process and used to modify the design and development of new concepts. The stage of idea generation and subsequent stages of the process are enhanced through the use of technology for it enables employees to share thoughts and insights:

Participant 11: "... we use the chat platform Slack quite a lot, so I'd say it's probably the quickest form and way that we get information out there in terms of ideas and inspiration, so we've got an inspiration channel. People post kind of ideas in there .... we'll kind of talk about it and see where we can apply that idea or learning or whatever it is across the project that we're working on".

### • A sequential and systematic development

In the majority of agencies, there is a requirement that clients validate innovative ideas before they progress to the development of the new solutions.

In the development phase, many participants mention following a structured process that, in some cases, includes traditional management practices, such as time and resource management, and in other cases the use of sounder project management frameworks with more rigorous development protocols. For instance, Participant 13 highlights the use of project management methods:

"When we feel we've got something that's really worth pursuing then it actually follows our normal project management process, which is partly based on Prince 2 principles and partly Agile".

### • A flexible development

Technical specifications are outlined for the technical team whereas the marketing team tends to rely more on sharing creative ideas for content. A few participants believe in the use of an unstructured approach when developing innovative service solutions, which they see as necessary in order to be creative. However, many mention the application of Agile principles, which means the use of a flexible approach throughout the process. Therefore, in addition to ensuring good internal collaboration, the participation of clients in the process is facilitated through alterations in the design, and the development of service concepts can be achieved quickly in response to changing demands. The participation of clients frequently manifests as co-creative development work where agencies provide the technical know-how and clients provide the innovative ideas. The need to adopt a flexible approach is acknowledged by many as significant to their innovation and as an issue to be addressed by those lacking that flexibility:

Participant 7: "So our clients want to iterate and they want to try something and see if that works, try it and try again and other than that straight line you have got bumps; but our business process doesn't support the way our clients want to work. So we obviously want to work the way our clients want to work but our process doesn't allow for that".

#### 3. An application stage:

In the third stage (the validation phase), clients conduct some tests before validating the developed solutions and subsequently giving their approval to applications. For many agencies this means clients signing off projects, often with a written confirmation. This stage also incorporates an assessment phase, where in many agencies, the solutions are assessed following their application. This evaluation is carried out through communication with clients and feedback. In a few agencies a follow up service is also included.

Agencies carry out other type of service innovations. Contrary to service solutions, which are tailored to client projects, these innovations, developed internally, are aimed at markets as well as clients, and are most often technology-related. Therefore, in addition to proving useful they aim to secure a return on investment. Participant 12 highlighted the innovation of products:

"We develop our own software, normally just for fun but occasionally we come up with an idea we think might make some money and some of our products make money for us".

On some occasions, these technological related innovations are carried out in an innovation lab and therefore follows an external process with the reliance on financial support from clients or funding from the government. The majority of participants mention that product innovations result from informal trials before their launch to the market and to the systematisation of services and new operational procedures. This is evidenced by the following comment:

Participant 4: "Once we've sold three of a platform we then recognise it as a product and then we'll push ahead and put more resource into that product. They need to sell it three times before it is recognise as a new product".

Furthermore, on a few occasions, innovative service concepts result from successful bespoke solutions that are scaled up across a particular market and/or geographical area. This indicates that no process is used to perform such technological innovations. Moreover, this type of innovation remains limited in all agencies due to the lack of time and finance.

Many agencies develop innovative procedures using new and existing technology aimed at enhancing their internal efficiency and subsequently the overall service delivery to clients:

Participant 7: "This morning I received an email from my colleague telling me about a new bug reporting procedure, which is now what we're going to follow: he is responsible for development, he is the operations director and he has listed out what the new bug procedure is going to be, and it's a bit different from the other procedure".

No particular process is followed for such innovations as the innovative procedures are identified as circumstantial and performed at a given time when seeking to resolve specific internal issues. A few participants mentioned that these outcomes are sometimes recognised as innovative at a later stage, as indicated by Participant 9:

"We kind of just thought that with our internal processes, it was just something we were doing, but then in meetings and consultations we would end up talking about how we were doing things".

Participants added that some of their implemented procedures are subsequently offered to clients, which results in technological related innovations.

Along with operational procedures all participants stated that they develop innovative methods during services. These refer to the interactive element of services solutions during their delivery course, which underlines their view of services as a process. The innovations, which consist of the adoption of new practices, and the amendment of existing ones during interaction and delivery, do not follow any process.

The innovations carried out by the agencies with their respective uses of innovation process are highlighted in Table 4.30:

Innovation outcomes	Innovation process	
<b>Service concepts</b> (New creative and/or technical bespoke tangible solutions resulting from the demand of clients to solve a specific problem)	<ul> <li>Three overall stages: initiation, expansion and implementation: Participation of clients in the process Flexible process (Agile) Use of technology</li> <li>External process (innovation labs)</li> </ul>	
<b>Technological options</b> (Technology-related, aimed at clients and markets, seeking to make a return on investment)	<ul> <li>No process - informal trials and systematisation of service solutions and new operational procedures</li> </ul>	
Service delivery system/organisation (Operational processes: Innovative practices that use new and existing technology, aimed at enhancing the internal operating efficiency of agencies)	<ul> <li>No process - innovation is circumstantial and performed when seeking to resolve specific internal issues. Can be recognised as innovation posteriorly</li> </ul>	
<b>Client interface</b> (Innovative processes linked to the delivery of service solutions, technical methods and interactive components of service solutions within the course of delivery)	<ul> <li>No process – adoption and amendment of new and existing service delivery methods</li> </ul>	

Table 4-30 Innovation outcomes and innovation process in the studied cases (Source: Author)

The key themes identified with regard to the nature of the innovation process in the small digital marketing agencies is highlighted in Table 4-31.

# Nature of the innovation process

- A client-led service development (innovation is developed as a response to clients' issues during the development of services)
- Three core stages: induction, expansion and application (validation and assessment) stages
- A participatory development (internal participation across teams and agencies, and client participation with feedback and co-creation)
- A sequential development (i.e. validation and sign off from clients)

- A systematic development (i.e. use of management practices and project management methods)
- A flexible systematic development (i.e. use of Agile principles)
- A development based on understanding customers

Table 4-31 Nature of the innovation process in the studied cases (Source: Author)

# 4.3.3 Characteristics of social, knowledge and structural capital.

This paragraph highlights the relationships in the task environment identified as core to the activities of the agencies. These relationships have been characterised as weak and strong ties. Tables 4.31 and 4.32 provide an overview of the structural and relational features of these relationships.

#### 4.3.3.1 **Characteristics of social capital**

#### 4.3.3.1.1 Weak ties and trust

# 1. With other digital marketing agencies

# When needed and complementary

The majority of agencies relate to other digital marketing agencies when needing to find additional workforce due to work overload or when requiring specific skills that are not available in-house. They also relate to other agencies when brought together by a client to work collaboratively on a project. These relationships are contractual and many participants recognise that they do not seek to establish deeper connections although relationships between local agencies are stronger as they often know each other. Digital marketing agencies are not seen as important as clients hence a small amount of time is spent in developing connections. When working collaboratively the conditions of relationships are dependent on the complementarity of the skills and level of competition, which means that the connections are stronger when direct competition is lower. Connections are also stronger when one agency has a leading role in the project, as highlighted by Participant 10:

"Because you are all on a level playing field, no one has authority and the ability to lead, unless you have a lead agency ... and be the boss so you can tell other agencies what to do ... it's quite hard when there are two different opinions as no one has the authority to do either; that's when things can fall apart".

#### Distant relationships and limited exchanges

Ties with agencies are weak, since competition contributes to a lack of closeness. Furthermore, whilst many participants describe relationships as pleasant these are evidenced as distant based on the rarity of interactions outside projects. All participants acknowledged that an overall lack of trust with other agencies is also attributable to competition despite the implicit understanding across the industry to morally behave with regard to client appropriation. This lack of trust is evident by their limited exchanges, as pointed out by Participant 11:

"It's a bit of a middle ground with that because there's an area I suppose you can't get too close with anything that is competitive, there's a certain amount of information that we'd want to keep here; yeah probably the idea would be a middle ground so where we have a good rapport with them and kind of casual but then not too much, yeah not too close".

Nonetheless, trust is acknowledged in relation to the quality of the work that other agencies deliver during projects and in the understanding that working together is of mutual benefits, and therefore recurrent work over time is considered to lead to more trusted relationships. This is consistent with the lack of trust that participants identified with regard to agencies brought by clients, with whom they have not previously worked with or teamed up with through recommendation.

While most relationships with other digital marketing agencies are contractual few agencies mention establishing relationships through networking. One participant belonging to a membership group highlighted that this practice enables the sharing of experiences and learning gain from larger and more experienced agencies. However, ties remain weak since the interaction, which occurs several times a year, is occasional. Furthermore, there is indication of a low level of trust since exchanges relate to generic market information.

#### 2. With freelancers

#### • Skills provision

Few agencies stress their relationships with freelancers to whom they outsource specific parts of their service solutions and to who they bring in when in need of additional technical and creative skills. Relationships are described as distant despite the involvement of freelancers in the work of the agencies and the lack of competition; this is due, in some cases, to tension rapidly arising with work-related issues and the need to manage demanding relationships. Ties are weak, as evidenced by rare interaction outside projects and need-based collaboration:

Participant 17: "We hire developers depending on our needs. So for a one off project it's like 'if you do this project we'll give you this'. It's not a biding process but with a couple of developers depending on their availability if we cannot offer them the price we negotiate".

#### • Expertise and protocols

Agencies call on freelancers with whom they have previously worked or who are internally recommended and previously vetted. Consequently, there is trust with regard to their ability to deliver work. However, most often these are not given access to clients and internal systems, and are required to follow protocols guided by contracts. Whilst the latter ensures privacy and confidentiality, it also emphasises that trust rests on legal agreements in addition to previous working relationships, as confirmed by the following comment:

Participant 8: "For certain projects, we bring outsiders to what we are doing as well so we have to trust them as well; sometimes we get them to sign an NDA's based on what we're doing, generally speaking with any kind of NDA work we are doing ... we have to make sure we trust those guys as well. So they are also under contract with us to make sure that everything is seamless".

#### 3. With clients' partners

#### Compelled and trading agreements

Relationships with client partners are acknowledged as relevant for a few agencies who rely on them to provide data with which they can develop their services, such as marketing campaigns. Ties with these suppliers are weak as exchanges are based on commercial agreements, and therefore collaboration is not deliberate. Moreover, there is a lack of trust due to some level of competition:

Participant 4: "Some of them see us as a threat because we do some of what they do and ... we are 13 years old in this industry. We're a dinosaur you know ... that brings experience so they see us as a bit of a threat".

The interaction between both parties is also occasional, once or twice a month only when required, and non-existent once projects are complete.

# 4. With partnering organisations

# • Work provision

A few agencies mention their relationships with third party organisations from the educational and not for profit sectors, in this case universities and healthcare organisations with whom they collaboratively work. Ties with these partners are weak as the majority of relationships are intermittent or in the process of being developed and were therefore described as distant. The need for each partner to generate revenue and the lack of project leader during projects was identified as factors that do not allow the display of closeness between partners. This provides evidence that the underlying purpose of such relationships is to increase work opportunities.

# Social media communication

The weak ties are illustrated by occasional interactions that occur outside projects. Whilst interaction is referred to as frequent, on a weekly basis or during projects, social media is mentioned as the main tool used to stay informed, which results in the lessening of direct interaction:

Participant 7: "I'd probably say weekly not daily but (..) probably daily in terms of social media and being aware of what's going on but you might not necessarily speak or email on a day-to-day basis but actually daily you are aware of what they are doing".

Participants recognise that trust is low based, as the majority of relationships are new, which highlights the need for time in generating trust.

# • Occasional contribution

For a few agencies, universities are viewed as providers of human resources and relationships have been established with the aim of finding new skills through graduate recruitment schemes. Ties are also weak since the relationships are not referred to as close but rather as contractual agreements that seek to be mutually beneficial. Interactions are not frequent, and trust is seen to rest on the competency of universities to provide these resources. Nonetheless, one participant highlights more trusted relationships with a particular university; this is based on the agency delivering some digital marketing input to the organisation's courses and programmes.

#### 5. Recruitment specialists

#### Transactional and contractual

Only a minority of agencies relate to recruitment specialists, who provide them with human resources. However, ties are weak as interactions are primarily reliant on the need to resolve a specific issue, which is understood to not require closeness. Despite the on-going contractual relationship, interaction is occasional or rare and only undertaken when needed. Some participants see trust as implicit since the relationships are open and transparent, which is necessary to protect each other's reputations in the industry. For others, the underlying nature of the work carried out by recruitment specialists means that they cannot be trusted, which means that contracts are required to ensure the correct delivery of services. Many agencies mention that they do not use and interact with recruitment specialists due to a general lack of trust in their capabilities and commitment to satisfy their demands:

Participant 14: "I sign [a] legal contract with them saying they can't (..) I've got exclusivity so they can't take my staff and put them somewhere else because they're basically head-hunters".

#### 4.3.3.1.2 Strong ties

#### **1. With providers**

#### • Essential and reputation based

Providers are considered relevant to many agencies for the delivery and outsourcing of specific parts of service solutions, which cannot be developed internally. Some participants comment, for instance, on using production and printing companies to develop commercials and marketing leaflets. Ties are strong for they are built on close relationships that are based on a solid reputation as the providers in the industry, and on previous successful work:

Participant 3: "We have a preferred network of contacts that we'd used from production houses to illustrators, to new business people who are [in] (city X) or (city Y); sometimes we use people in London, it depends on the project".

This means that agencies are confident about providers responding to their demand and delivering the work according to their needs. These are need-based relationships with frequent interactions as they communicate on a weekly basis. However, this interaction is attributed, in many cases, to the commercial motives of suppliers, which means them calling frequently. Trust is present for it is intrinsically built on the ability of providers to deliver a needed part of the project and to manage confidential information. Frequent interaction is found to generate trust by helping agencies and providers to get to know each other better.

## 2. With clients

#### • Purposeful and intrinsic

All agencies have established ties with their clients across different industries who they see as their most relevant contacts since they enable them to remain in business:

Participant 15: "...they definitely shape the way that we do business because we have to think of multiple solutions and ideas to service our clients' need".

Participants indicate that clients contribute to their innovativeness, as shown in the following comment:

Participant 4: "I think that they rely on us to ensure that they compliant by law with their privacy and data protection and they look to us for innovation and they expect us to provide them the very best return on investment. I think that we continually show that and do that".

Therefore, agencies invest in establishing and maintaining good relationships, which, as a result enhance client loyalty and develop their role as experts. Strong ties between agencies and clients are reflected by their close connections. For some participants, this closeness is purposeful, particularly with regard to bigger accounts, which implies a frequent interaction and socialising out of working hours. For others, closeness is intrinsic and compulsory for they view themselves as an integral part of their clients' businesses and required solutions.

#### • Compatibility and ethos

However, there is an indication that values plays an important part in being closely connected, which means that agencies are selective and work with clients who share similar values:

Participant 9: "... we clicked, in that we looked at the world in the same way; we are very similar people in the way we see marketing and digital in the same way. We are very people-orientated here, we will only work with clients that share our values – it's a big thing for us".

However, relationships are not uniform and are subject to the clients' personality and type of organisation, in addition to contractual agreements. Thus, in some cases connections are described as distant when clients interact using a business approach and closer when using a more informal approach. Participant 17 confirmed the latter:

"... one of my best clients, she has two children and takes them back to my house so we can talk about similar things at work and some other things outside of work and ultimately we keep delivering for you that makes her good at her job, keep them happy and if she moved to another company she would take us with her".

A few agencies find that it is easier to develop close relationships with smaller client organisations for it allows a more direct communication with management, in contrast to larger organisations where communication is generally conducted through a team or business unit. Nevertheless, it is recognised that closer ties can easily be developed depending on the position held by the key contacts and their receptiveness. Client participation in projects is viewed as a further significant factor in developing closer connections, as opposed to a lack of involvement.

#### • Long-term focus

There are indications that the majority of relationships are based on the idea of longterm strategic service provision, as opposed to transactional provision. This is evidenced by many agencies that are seeking a partnering type of bond and behaviour with clients, which develops over a long period of time and leads to closer connections. These partnerships are all based on a proactive communication and shared previous successful experiences as well as an understanding of expectations. This implies close connections, which are not necessarily reliant on geographical proximity.

Strong ties with clients are reflected by frequent interactions that include reporting and conversations on hourly, daily and weekly bases. Frequent interaction is seen as inherent to client servicing by informing on development and potential issues in projects. However, it is recognised that these interactions are adapted to the need, working approach and availability of clients, and the type of projects under development:

Participant 6: "If it's a tactical event based campaign then there is a big build up to that event happening so there will be lots of contact in that period".

Participant 2: "You have to plan it around their flexibility and availability ... each strategy for each client will be different ... one might be recruitment based and one might be online tuition, so they're all different strategies"

For many agencies, interactions with clients outside projects, which consist of monthly catch-ups, are less frequent despite them being on-going due to contractual agreements regarding needs and support. In contrast, it was acknowledged that interactions in transactional relationships are rare or non-existent.

#### Contractual agreements and expertise

All participants view trust as implicit as they are required to access sensitive and confidential client information in order to deliver the work. However, there is

indication of contractual agreements playing a relevant role in reinforcing trust as a few participants highlight that these relationships remain commercial and that trust cannot be absolute. Contractual agreements are also used by agencies with third parties in order to reinforce the trust from clients.

Recurring customs and experiences help clients to understand how agencies work, which helps to develop the long-term and trusted strategic relationships that many agencies seek with their clients. Trust is primarily generated through the quality of work, the time in which the work is delivered, and the fulfilment of pre-agreements. Subsequently, agencies are able to cultivate an image of experts that involves showcasing their knowledge and capabilities and providing impartial advice to clients. This expertise, combined with a similar ethos, results in a mutual recognition where clients rely on agencies to deliver solutions and agencies rely on clients to allow them to deliver solutions, therefore enabling a two-way trusting relationship:

Participant 3: "I think that's a huge element but it's quite hard for a non-creative person to look at something that's being presented to them and understand why it's going to work. It's based on trust and they will trust us to do a job and we will trust them to let us do our job and to pay us".

Behaviours were mentioned by many agencies as key elements that help to maintain trust with clients. This is due to a large number of agencies operating in the industry who are seen as delivering unreliable and unsatisfactory services:

Participant 4: "I think it's about honesty and integrity and not shafting your customers. There's too many (..) a lot of companies out there as soon as that contract is signed will either disappear and they'll never hear from them again or tie them up with terrible quotes and invoices".

This implied informative communication throughout the project in order to provide reassurance.

# • Time requirement

For the majority of agencies, clients who remain in contact after moving to a different organisation convey trust by developing more informal types of interaction, which

imply that trust is also related to connections between individuals. Many participants acknowledge the lack of trust with regard to new clients, which also implies the need for time to build trust. Although for one agency, long time-trusted relationships have resulted in clients passively receiving solutions and being discontented, and the agency relying on expected client customs.

#### 3. With technology providers

#### Strategic and dependency based

All agencies had partnering relationships with technology providers, such as Google, and Facebook and other web-hosting companies, which are referred to as technology partners and media owners. These relationships are seen as strategic and transactional by one agency, but necessary to allow them to deliver their services to clients. However, for the majority they are viewed as providing reliable technical platforms and effective support that is highly beneficial to their activity. Moreover, many are Google certified-partners. Participant 8 draws attention to the relevance of the relationships:

"When you're working with the right people you can just get on the phone to them. They are an extension of your organisation, rather than you're just seen as 'you provide this to us'. It is a two-way relationship".

From the above comment, relationships are considered a close two-way connection, which helps create stronger ties. The technical and up to date requirements of agencies and the need for support during the development of client solutions means that agencies are largely reliant on technology providers. This is reflected by their frequent interactions, (for example) daily, weekly and monthly basis, in addition to any other time when needed.

#### Expertise and motivated support

Trust is seen as unconditional since partners are well-established and renowned organisations, and therefore can be relied upon in terms of technological and technical expertise; moreover and confidential exchanges are undertaken. However, for many, trust is weakened by the commercial motives on which these relationships are based.

#### 4. With partnering agencies

#### • Strategic collaboration and ethos

A few agencies have established strong ties with partnering agencies and other marketing organisations, which implies longer-term connections through recurrent collaborative projects in which complementary skills and specialisms are brought together. These relationships rest on sharing similar values and on the strategic purpose of accessing specific client segments in an industry.

Connections are described as close since the awareness of possible defensive attitudes linked to competition, which makes them cautious, leads to partnering with organisations where past working experiences have been successful. Participant 12 highlights the defensive attitude of partnering agencies:

"Often account managers will change hands or they will be so protective they won't let us speak to the client and so there are problems with communication and there's extra work that need to be there. So it's (..) we do choose our partnerships quite carefully nowadays to avoid those sort of situations because they often lead to tears".

#### Individual and personal connections

The strong ties are evidenced by the frequent interactions during projects and occasional interactions outside projects. However, many participants explain that interaction is based at an individual and not organisational level. Thus, the replacement of individual contacts in partnering organisations most often leads to a different type of interaction and closeness, which means that strong ties are not fully guaranteed.

These strong ties are acknowledged as implicitly trusted when a personal connection is present with the partner. If not, trust needs to be established prior to partnering due to the risk of client appropriation from potential partners, despite the moral understanding to not do so. This trust is built on individuals knowing each other for several years and on their ability to keep confidential information. Reputation in the industry helps in the generation of trust for it indicates fewer chances of dispute with regard to commercial agreements. The structural and relational characteristics of both the weak and strong ties of small digital marketing agencies with their task environment are illustrated in Tables 4-31 and 4-32.

Structural characteristics	Relational characteristics		
Weak ties			
<b>Other agencies:</b> Relationships are when needed and complementary. Lack of closeness due to competition Rare interaction outside of projects	Implicit understanding of ethical behaviour, lack of overall trust due to competition. Limited exchanges, exchange of generic market information.		
<b>Freelancers:</b> Relationships provide skill resources. Need-based interactions Lack of closeness due to potential tension and work related issues. Rare interactions outside of projects.	Contractual and protocol based trust. Trust is based on expertise, no access to clients and internal systems.		
<b>Clients' partners:</b> Relationships are compelled and trading agreements. Lack of closeness as collaboration is not deliberate, no communication outside of projects.	Lack of trust due to competition.		
Partnering education and not for profit organisations: Relationships provide work opportunities. Lack of closeness due new relationships and to lack of leading organisation in joint projects. Communication through social media Occasional interaction outside of projects through and contribution to content.	Lack of trust due to relationships being new. Based on the expertise (ability to deliver a contract)		
<b>Recruitment specialists:</b> Relationships are transactional. Lack of closeness as not required to deliver contracts, need-based interaction.	Lack of trust due to nature of business, Trust is contractual and based on maintaining mutual reputation in the industry.		

Table 4-32 Structural and relational characteristics of weak ties in the studied cases (Source: Author)

# Structural characteristics Relational characteristics

Strong ties			
<b>Providers:</b> Relationships are essential to activities of agencies. Frequent interaction due to commercial motives, closeness based on reputation and previous joint work.	Trust in based on expertise; work is a relevant part of solutions, keeping confidential information.		
	251		

<b>Clients:</b> Purposeful long term relationships. Close as socialise with larger clients, direct communication with smaller clients, closeness is intrinsic and compulsory, ethos is relevant, take part in projects. Frequent interactions as requirement adapted to client.	Trust is implicit, access to sensitive information, contractual agreements, and time; Trust is based on expertise of agencies.
<b>Technology partners:</b> Strategic and dependency based relationships. Close, as two-way relationship, agencies are reliant on their support. Frequent interactions for support and commercial purposes.	Trust is unconditional due to reliance, renowned and well-established partners, and confidential exchanges. Awareness of commercial motivation.
<b>Partnering agencies:</b> Relationships are strategic. Ethos is relevant. Close ties as familiar from previous joint work, personal connection. Frequent interaction at individual level.	Trust based on personal connection, established prior to entering partnership, long-term relationships, ability to keep confidential information.

Table 4-33 Structural and relational characteristics of strong ties in the studied cases (Source: Author)

#### 4.3.3.2 Characteristics of Knowledge capital

#### 1. Current

All participants commented that knowledge is a core element of their organisations given the knowledge-based nature of digital marketing activities. Many participants view their knowledge as diverse and this allows them to perform a wide variety of work, which they describe as appealing to clients. Aside from projecting a confident image, this wide-ranging work leads to the servicing of larger clients. Therefore, higher fees can be charged that result in an overall financial growth for the agencies. Discerning the latest services and products in markets with their delivery methods, and identifying the requirements to develop innovative solutions are relevant:

Participant 16: "It would be very much knowing what's going on in the sector of digital marketing so knowing what's the latest development, things change all the time, so literally every few weeks new products come out, new things happen..."

The above comment also highlights the fast changing nature of the digital marketing industry, which reinforces the relevance of knowledge to accurately allocate resources across teams and as a result enhance overall efficiency.

#### 2. Expertise

The majority of participants view knowledge of business and finances as necessary to the good management of their agencies. Commercial and marketing knowledge is also described as significant to attract new clients, interpret their briefs, and show them a return on their investment. Furthermore, participants explain that they rely on core technical and creative knowledge, which is used to develop and deliver services. For many, this knowledge suggests the ability to develop longer-term, and therefore more beneficial, working relationships with clients, to translate briefs into tailored solutions and to explain and advise clients on digital marketing solutions according to their needs.

These abilities are mentioned as pre-requisite to being regarded as an expert. However, there is an emphasis on technological knowledge, which some participants refer to as the most fundamental and in-depth knowledge in their organisation:

Participant 11: "... it's probably more like a technical knowledge that's more important to us, definitely ... Yeah, obviously a couple of our department are quite technically led so the back end development they work on coding languages".

Technology partners strengthen agencies' technical knowledge through the training they offer and the practical support they provide when difficulties emerge or new technical tools are used in developing innovative service solutions. Likewise, freelancers and providers enrich this expertise for a defined period of time through the specialism that they convey when working on service solutions on behalf of agencies. Furthermore, new members of staff are recognised for bringing different ideas and methods of working from their previous organisations, which are additional contributors to expertise.

#### • Experiences

Many agencies see the experience of testing and implementing new internal processes and service solutions as a main contributor to developing core knowledge. Agencies with strong analytical skills carry out deeper analysis of previous experiences and the learning is disseminated across teams. The strengthening effect of experiences on knowledge rests on informal exchanges that take place during

coffee breaks and lunch hours as well as more formal and intentional exchanges during meetings, workshops and away days. This is highlighted in the following comment:

Participant 12: "So one year we had a competition where we had two teams trying to build something in that time. Last year we all collaborated together to create a new start up, which was good fun".

Other digital marketing agencies give agencies exposure to new and different ways of operating when working together on respective projects or on behalf of a client, which enhances core knowledge.

#### • Education and professional development

Qualifications were mentioned as another contributor to core knowledge. A few participants recognise the importance of marketing and technology related qualifications gained from universities. However, for the majority, this knowledge relies on professional training, which means that training is widely available and accessible in all agencies. Trainings sessions are delivered internally, face-to-face or through online facilities, as well as attended externally. Certification gained from professional trainings was regarded as particularly beneficial to technical knowledge:

Participant 1: "We develop in what's called 'Umbraco', and that's a system and there's a whole community for these system developers, so they have to be certified developers and they have to actually pass exams to do that so a certain level of knowledge is required".

#### Personal development

Alongside qualifications, core knowledge is acquired by the initiative members of individual members of staff, which many view as an inherent characteristic of digital marketing agencies. This is commonly achieved using books and online sources, such as blogs, videos and other industry related online sources. However, many participants state that an inquisitive nature and free time are necessary to further develop, which indicates that expert knowledge is largely dependent on the personality of individual and the culture of agencies.

#### • Market and industry data and feedback

In addition to the core knowledge, all agencies recognise the need to be familiar with their task environment and digital technology. This means both having facts and making sense of up-to-date facts about clients with reference to their industry, business and strategy. It also implies having trends on new products, services and competitors as well as the online and offline behaviours of consumers:

Participant 15: "... to look at things online, you know blogs on line and things like TechCrunch, etc, find out what the competitors or what's being talked about as the new approach to online".

For the majority of agencies, this knowledge is in the form of feedback, presentations as well as industry and digital related books, blogs and online articles. Many participants mentioned exchanges of data through online platforms and new technical publications received at events:

Participant 2: "So, if one of the developers sees that there's a conference on the system that they build website ... they'll all go to that and they'll get the newest releases".

Providers who operate in different industries communicate the latest feedback on data and trends to agencies about particular markets when working on their behalf, which helps them increase their market knowledge. Similarly, technology partners communicate up-to-date technical data throughout frequent communication with agencies A few participants also mentioned data received through commissioned research, which they use to further analyse their task environment, although this was dependent on their financial resources.

#### • Deeper insight

All the agencies acknowledged the relevance of being familiar with their task environment in their development and delivery of service solutions, whilst a few recognised a further need to be perceptive of that environment, which was confirmed by Participant 7: "We made very expensive websites that did really great things that's not quite enough any more the world has changed and how people use technology has changed ... we're not just going to speak to somebody about 'do you want a website? This is how much it is going to cost, this is what we're going to do'."

This perception is formed by the combination of core and market knowledge and underpinned by a comprehension of the fundamental elements of digital technology and the latest digital technology available, the needs of clients and the implications of digital technology for their activities, and the behaviour of consumers. It is viewed as helping to develop collaborative working relationships with clients and interactions with customers and is generally within the scope of a particular client market with reference to a specific service solution.

A couple of agencies acknowledged their focus on seeking even deeper understanding of implications, behaviours and technology within the wider range of society and general environment. This deeper and broader understanding is aimed at enhancing their senses, which will not only allow them to be ready to innovate but also to anticipate innovation. Participant 14 confirmed this:

"I'd say ... being able to read the market in advance to know what is needed out there".

The characteristics of knowledge in small digital marketing agencies are presented in Table 4.33.

Expertise: based on experiences, education and professional development, and personal development. Shaped by social capital.		
<b>Knowledge of business:</b> finance,	Business, commercial and financial know-how	
marketing, commercial ability (i.e.	Based on educational and professional formation	
interpreting briefs, showing a return	and qualification	
on investment)	Applied in the running of the organisation	
<b>'Core' technical and creative</b>	Based on educational and professional formation	
<b>knowledge (digital and marketing)</b>	and qualification	
Technological and creative based	Shaped by practical experiences (i.e. testing, new	
knowledge with the added ability to	processes)	
explain and advise clients according	Shaped by self development	
276		

to their needs	Shaped by new ideas brought by new employees Relies on informal and formal exchange internally Shaped by external sources: technology partners (training session and practical support), other digital agencies (exposure to new working methods) and freelancers and providers (temporary specialism)	
Market and industry data		
Facts on clients business and strategy, competitors and digital technology, consumer behaviours	Facts and figures gained from industry and online sources	
Deeper insight of the task environment and general environment		
Understanding of the	Encompasses core knowledge and knowledge of the	
technology needs of clients and	Contributes to collaborative working with clients and	
implications of digital technology,	interactions with customers	
and consumer behaviours	Focuses on clients and their market, and in some	
	cases on wider society	

Table 4-34 Characteristics of knowledge in the studied cases (Source: Author)

# 4.3.3.3 Characteristics of Structural Capital

# Organisational practices Sharing

All agencies mentioned using systems and organisational practices to capture their knowledge. However, when asked about organisational knowledge, all mentioned their employees as a main system of capture, which means the need to provide them with a satisfying working environment and conditions to ensure that the knowledge remains in the agency. The communication of knowledge across the agency is therefore described as an indispensable practice. However, this is more applicable to some agencies than others as evidenced by Participants 2 and 4:

Participant 2: "I mean if half of the developers walked out tomorrow, and a PPC guy and a SEO guy, all we literally have is past things to go on, so past reports that we send to people, but in terms of being able to carry on without them I don't think we could".

Participant 4: "I think we're pretty solid at that at making sure that knowledge is shared and not kept to one person".

## **Phased approach**

In addition to employees, many agencies recognise that knowledge is embedded in their day-to-day practices. The practices are based on project management and marketing approaches that they apply across their agencies, which indicate that they are driven by the overall organisational values and culture, as highlighted by Participant 17:

"We see what sticks and we transform that into something that can be systematised; but we don't do it the other way round so we don't do a sheet of assumptions, then a waterfall project where we put everything together and then go to the market ... our lack of organisation is an Agile process".

These organisational practices are maintained and evolve through training and collaboration between employees, and through the different levels of hierarchy, which further emphasise a reliance on the communication of knowledge:

Participant 12: "Again, because project management is collaborative, it's about the team working together and meeting regularly and taking out what they are doing. The rest of the teams sort of understand those processes... so the knowledge is there".

# • Records

# **Technical focus**

The majority of participants explained that previous projects are normally recorded in the form of reports, case studies and technical guides. These documents encompass the technical steps followed in developing previous service solutions, which in some cases are described as technically challenging. Agencies are therefore able to recall processes when needed in new projects. Case studies and technical guides are occasionally sent to clients to help them better understand the solutions they want to implement, which leads to the reinforcement of relationships between agencies and clients. A few agencies recognise that their recording is not systematic. This consists of storing the best and recurrent used steps as well as the recurring issues and solutions that emerged during the development of new service solutions.

#### **Organisational focus and solutions**

Knowledge of financial data, and applied management strategies and processes is captured by a few agencies through handbooks and guides. These provide useful guiding techniques and insight into the running of the organisation and therefore are given to new employees to facilitate their introduction and integration. A few participants also mentioned that organisational knowledge is enclosed in the physical solutions that the agency develops for their clients, which for instance includes websites and marketing campaigns. Thus, knowledge is viewed as enduring and easily accessible, as confirmed by Participant 15:

"All the campaigns that are being run ... they are created online so all of the hard work that has been put in by the employees is there to see online, even if the whole team was fired ... and a new team was to be brought in ... they would be able to see some of the work that the previous employees did, and use that to continue innovating".

# Software and Internet based Programmes and applications

All agencies rely on software and online applications to capture knowledge. Traditional applications software are used to store knowledge in the form of databases, presentations and word-processing documents. Additionally, many use project management and customer relationship management (CRM) software. These applications include client contacts and data, client interactions, briefing sessions and past presentations. Furthermore, web based applications, such as Google docs, Trello and Slack are extensively used because, and aside from storing data and communications they provide easy access to knowledge and easy communication of knowledge across teams:

Participant 16: "....the knowledge we have with the history of what's going on with clients is being recorded and between us we have that information, we can share knowledge that way....Yeah, we have a kind of system that's called Slack, that's a project management tool so internal messaging really".

Web-based applications are also extensively used as they give access to knowledge during projects and enable communications with clients. These systems are therefore key enablers and contributors to interaction and collaboration internally and with their task environment:

Participant 10: "Actually the biggest system we use to communicate is called 'Slack', so we use that and have lots of different channels. I do a lot of the clients so I speak to them a lot so what I'll do is speak to them on the phone and basically come off the phone and write notes. We do a lot of note sharing".

#### Social media and blogs

Social media and blogs are also described as containers of knowledge. In addition to providing storage for data and insights, the online applications enables agencies to widely communicate their knowledge and knowledge from third parties to their task environment.

Many participants acknowledge the regular access of online sources, such as industry blogs, news, podcasts and videos, and websites, which provide them with easy access to free and wide knowledge that is reliable and used as coaching and support. These sources contribute to the development of their own knowledge. One agency also gains access to knowledge using online knowledge services to which they subscribe, whilst another describes their knowledge as being stored in some of the projects they have developed and made freely available through Open-Source.

# • Sustaining good communication with the task environment Conventional approaches and client facing

Moreover, all agencies seek to ensure good relationships with their external environment and consequently apply systems and organisational practices for this purpose. The most conventional practices and systems are emails, phone calls and face-to-face meetings. Social media and traditional marketing communication based practices are used with regard to promotional news particularly with clients. However, many agencies employ dedicated account managers, which means that a personal and consistent point of contact is offered to clients:

Participant 1: "So they are ... here to ensure that the work gets done, but also to communicate with the clients, to educate them, speak to them on the phone, by email in order to keep them up to date with the project, how successful it's been, talk to

them about the reports, always ensure that it's been executed out there with the people who've got the knowledge and the skills to be able to do it".

#### Management responsibility

In a few agencies the senior management team and CEO are responsible for the administration of client accounts; while in others the responsibility rests on employees, as mentioned by Participant 10:

"... we are very production heavy so we don't have any dedicated account handlers, so everyone here that speaks to their client also works on something ... so no one actually doesn't not do the work, which I think builds a really good thing that everyone has to muck in and do the work and speak to the clients".

#### Adapted to clients

This evidences the range of different systems and organisational practices that agencies used to ensure good relationships with their clients. However, it is recognised that communications are tailored to the organisational structure and culture of the clients, which consequently requires the adaptation of practices and use of systems and that these are adaptable:

Participant 3: "With other companies it is quite informal ...it depends what sort of form the meeting wants to take, so there's lots of (..) a client that works every day in their office would love to be taken out to somewhere that was a new space and it's much more free and out the box thinking."

The more recent web based applications, which enable document sharing are regarded by the majority as helping the execution of tasks during projects and therefore contribute to effective communication with clients. For one agency, the use of specific systems is a contractual requirement, whilst a few agencies view the use of contractual requirements as providing some fundamental direction during projects. These are adapted to each client and offer security, which means that they are useful procedures to further relationships. Additional practices are adopted by agencies that include among others intentionally managing a small number of client accounts, providing a detailed key account plan with objectives, and sending regular newsletters.

The majority of participants did not refer to many systems and practices apart from email, phone and meetings to communicate with contacts from the task environment other than clients. Relationships with suppliers and freelancers are based on informal communication that occurs when required. For the few agencies in contact with recruitment companies communication is also conducted when required and based on the use of a preferred suppliers list, which means the recurring use of trusted companies. A few agencies mentioned that they used Slack to communicate with other digital marketing agencies when working collaboratively for it enables fast and informal communication. Communication with partnering agencies and other organisations involves regular updates and checks by phone and email. Conversations with technology partners consist of random check ups, also by phone and email. Although, for one agency maintaining communication with technology partners is not seen as significant:

Participant 15: "I don't have to be rude to them ... but it doesn't really serve me anything to be having a good relationship with Google or Facebook because at the end of the day they won't do anything unique or bespoke for me, all they are going to do is open an account and I need to spend money with them, that's it at the end of the day. So, you know it's a service. They've got the monopoly on it and you know, [a] like it or leave it approach, really".

The characteristics of the structural capital in small digital marketing agencies are presented in Table 4-35.

Physical	Creative and technical knowledge is captured in employees.
Organisational practices	<b>Phased approach:</b> knowledge is captured in day-to- day practices based on project management and marketing principles. <b>Sharing:</b> the practices rely on communicating knowledge internally (training, collaboration, across hierarchy).
Records	<b>Technical focus:</b> Technical knowledge is captured in case studies, technical guides and reports.

	<b>Organisational focus:</b> Knowledge is captured in employee's handbook and guides. <b>Solutions:</b> Knowledge is captured in developed service solutions (websites, marketing campaigns).
Software and Internet based	<ul> <li>Programmes and applications: Software and internet based applications provide storage and easy access to knowledge.</li> <li>More recent online applications provide storage and easy access to knowledge and are contributors to collaboration and interaction within agencies and with their task environment (i.e. Trello).</li> <li>Social media and blogs: Provide storage of knowledge and communicate knowledge to a wider task environment. Reliable and free sources that contribute to developing expertise of employees.</li> </ul>
Sustaining good communication with the task environment	Conventional and client facing approaches: Different systems (emails, phones, face to face meetings, social media, web based application) and processes (account management practices) Adapted to clients: communication with the task environment is focused mostly on clients - The use of systems and processes are adapted to the culture and structure of client - Systems and processes contribute to effective communication with clients. Management responsibility: Sustaining communication with clients and the task environment is the responsibility of senior management

Table 4-35 Characteristics of structural capital in the studied cases (Source: Author)

# 4.3.4 Implications of social, knowledge and structural capital for the innovation process

# 4.3.4.1 Implications of social capital

Both weak and strong ties are found to have some implications for the innovation process of small digital marketing agencies, which are presented in the following subsections.

# • Potential (technical and creative)

For the majority of agencies, working with other digital marketing agencies exposes them to new ideas and thoughts. Additionally, collective working practices give the opportunity to employees to learn new ways of working:

Participant 1: "We do work on projects and have done before with other agencies in the city before, so there's obviously an educational process there because you learn about the way they work, how that influences you".

This new inputs are used in the generation of new ideas, design and development of service solutions. Thus, the creative and technical capability of the process is reinforced whilst the process becomes further reliant on internal resources.

For a few agencies, ties with freelancers provided additional resources, as different specialisms are made available to their pool of technical and creative skills, which is limited or lacking internally. This was evidenced by the following comment:

Participant 8: "We can always deliver projects because of all those skills that you got in the background ... I can bring one of the freelancers into the project, get him up to speed, bring in various freelancers in the project, we have a mini a team of people".

These resources allow for the development of service solutions and thus are essential to the process. However, freelancers are contributors to innovative service solutions rather than being innovative agents of service solutions.

The relationship with technology partners supplies many agencies with technical resources, which are particularly fundamental to smaller sized agencies where technical skills are further limited. Their competencies and experiences lead them to provide new and up to date technical perspectives and advice that have a motivating influence; this results in additional resources and a driving force throughout the innovation process. Technology partners are also sources of technical support when agencies are using unfamiliar tools and/or when new service solutions are tested. This results in the technical strengthening of the innovation process when developing and implementing solutions, which increases the possibility of technical features in new service solutions:

Participant 8: "Now, the technical value that we are able to deliver to our clients because of those strategic partnerships has been immense, and it sets us apart from lots of other agencies who were just doing it on price and cheap and cheerful".

The partnering relationships that several agencies have established with educational and not for profit organisations provide working opportunities through funded collective projects. These partnerships have helped agencies to raise their profiles and subsequently establish themselves in new markets. While the newness of the relationships do not consider whether these partnerships have a broader involvement in the innovation process, it is nonetheless evidenced that the expectation of partners on agencies to contribute with advanced digital solutions act as a motivator; this has led to the generation of innovative ideas and designs:

Participant 12: "With collaborative partnerships we don't say this is what we are doing, well we do say that but then we expect them to contribute ... So sometimes they say 'we want something really new and exciting".

Along with the understanding of their industry, clients provide feedback on solutions previously developed. This feedback helps to enhance the potential innovativeness of service solutions for it also acts as a motivator to generate innovative ideas.

# Consistency

Relationships with providers and clients engender useful insights that have influenced the innovation process. For instance, providers offer updates and trends on the particular markets they operate in and the technologies they specialise in, which help to generate innovative ideas and designs. Similarly, clients offer some understanding of their industry that is used in briefing sessions and throughout the different stages of the innovation process. This provides the agencies with a better understanding of the market for which service solutions are developed at each stage of the process, and thus enhances the consistency of activities throughout the overall process.

# Efficiency

In many agencies, clients also provide feedback following the testing of solutions in the development and implementation stages, which occasionally requires the amendment of solutions or delivery methods: Participant 2: We went through each step and we identified holes in the process somewhere we can improve and there was a part where there is a lack of communication ... and we said that's something that needs to be addressed. So from there we changed the process".

These amendments often imply making changes to enhance the efficiency of activities in the different stages of the innovation process.

# • Resources requirement

The need for clients to deliver innovative solutions to consumers prompts them to make requests influenced by the solutions they have seen in other digital marketing agencies. For a few agencies these demands present a guiding influence to wider thinking, which as a result generate ideas and designs that are more innovative throughout the process. Moreover, particular demands compel agencies to adapt their resources during the development and implementation stages of the process, as pointed out by Participant 6:

"From a client point of view, it can be that they come to us with a particular outcome in mind. Then it forces you to look at things from a new point of view ... how we go from there, what do we need to develop it, do we need to change anything in our process".

#### • Structure

#### A two-way process

However, trusted relationships with clients offer additional opportunities for a proactive participation in the process. This is evidenced in a few agencies that were able to make further demands and recommendations to clients when generating ideas and designing solutions. This resulted in a two-way process rather then agency merely responding to demands.

# • Dependency

Occasionally, providers generate innovative work when developing parts of solutions outsourced by agencies. The developed innovative component is brought back into the overall process of the agency:

Participant 4: "... we tend to get third parties that we use ... who will actually pass on the innovation back to us so rather than us innovating we get a lot of innovation from the services we use ...".

This suggests the direct implication of the providers on the innovation process and consequently, the need to consider them an integral part. However, in some cases the working relationships with providers are based on rigid protocols and a limited exchange of ideas, which consequently limits their contribution to innovation and effects on the process.

With regard to technology partners, there is evidence that their contributions and implications are linked to a wider technological dependency, which see agencies as constantly reliant on them in their process of developing innovative digital service solutions. Participant 14 highlighted this:

"... Facebook or Google or those kinds of people are also the main contributors to our innovation. Because they can change, they can remove advertising tomorrow and have a different model and then our business would be in trouble".

Tables 4-36 and 4-37 present the contribution, application and implications of weak and strong ties on the innovation process in small digital marketing agencies.

### Implications of social capital for the innovation process

- **Potential of the process**: ties provide additional resources that enhance the technical and creative capabilities of the process
- **Consistency of the process**: ties contribute to understanding target market, which enhances consistency of activities in the process
- Efficiency of the process: feedback leads to amendment aimed at enhancing efficiency of activities in the process
- **Resource requirement**: Demands from clients lead to activities in the process adapting to specific required resources
- **Structure of the process:** A two-way process. Trusted ties with clients lead to proactive participation in the process from both clients and agencies
- **Dependency of the process:** Activities in the innovation process are dependent on technology partners and some providers. These external sources become an integral part of the process

Table 4-36 Implications of social capital for the innovation process in the studied cases (Source: Author)

Implications of weak ties for the innovation process	Implications of strong ties for the innovation process
<ul> <li>Potential of the process: ties provide additional resources that enhance the technical and creative capabilities of the process</li> </ul>	<ul> <li>Dependency of the process: Activities in the innovation process are dependent on technology partners and some providers. These external sources become an integral part of the process</li> <li>Potential of the process: ties provide additional resources that enhance the technical and creative capabilities of the process</li> <li>Structure of the process: A two- way process. Trusted ties with clients lead to proactive participation in the process from both clients and agencies</li> <li>Efficiency of the process: feedback leads to amendment aimed at enhancing efficiency of activities in the process</li> <li>Consistency of the process: ties contribute to understanding target market, which enhances consistency of activities in the process</li> </ul>

Table 4-37 Implications of weak and strong ties for the innovation process in the studied cases (Source: Author)

Ties	Contributions	Applications	Implications for the Innovation process			
Strong (Clients)	<ul> <li>Technical data and insight</li> </ul>	<ul> <li>Guidance during project briefings</li> </ul>	The process is more consistent			
Strong (Clients)	<ul> <li>Market/industry understanding and insight/data</li> </ul>	<ul> <li>Guidance during ideation and design of solutions</li> </ul>	<ul> <li>The process is more consistent</li> </ul>			
Strong (Clients)	Feedback	<ul> <li>Feedback from previous projects</li> </ul>	<ul> <li>The process is</li> </ul>			
			•	taken into account in the generation of ideas and design of solutions Feedback from testing can lead to modifying implementation Feedback after delivery can lead to modifying delivery practices	•	more consistent The process is more efficient
-----------------------------	---	--	---	---	---	--
Strong (Clients)	•	Demands	•	Drive the thinking in the generation of ideas, design and development of solutions	•	The process becomes a two-way process
Strong (Providers)	•	Market and technical data	•	Updates & trends used to generate innovative ideas and the design of solutions that are adapted to specific and current markets	•	The process is more consistent
Strong (Providers)	•	Innovative component	•	Innovative component is developed as part of the solutions	•	The process is dependent on external sources
Weak (Other agencies)	•	Exposure to new working approaches	•	Input for idea generation, designs and development	•	The creative and technical potential of the process is enhanced
Weak (Freelancers)	•	Additional technical and creative resources	•	Technical and creative skills are used in pre- outlined tasks	•	The creative and technical potential of the process is enhanced

Weak (Partnering organisations)	•	Motivation	•	Expectations of partnering organisations increase innovative ideas and the design of digital solutions	•	The creative and technical potential of the process is enhanced
<b>Strong</b> (Technology Partners)	•	Technical support and resources and data	•	Practical support when using new and unfamiliar tools Practical support to test technically innovative and unfamiliar solutions	•	The technical potential of the process is enhanced

Table 4-38 Contributions, applications and implications of strong and weak ties for the innovation process in the studied cases (Source: Author)



Figure 4-1 Implications of strong ties for the service innovation process in the studied cases (Source: Author)



Figure 4-2 Implications of weak ties for the service innovation process in the studied cases (Source: Author)

#### 4.3.4.2 Implications of knowledge

#### • Flexibility

Despite one agency mentioning that their innovation does not rely on knowledge but on adopting a flexible process, for the majority knowledge is found to have some implications for innovation. This is evidenced by the additional possibilities that up-todate knowledge on customer needs and behaviours offers to services not previously developed, which result in targeted innovative service solutions. Additionally, knowledge is found to have some implications for the innovation process. For instance, the requirement for collective knowledge and shared experiences in agencies, which was emphasised as a knowledge characteristic in the previous section, is found to be significant in shaping the innovation process. This is evidenced by the fact that a lack of collective knowledge, as observed in one agency, needs activities to be carried out independently and distinctly, which results in the process being more linear and less flexible.

#### • Reliance and consistency

Furthermore, the knowledge that employees gain through collaborative working practices with other agencies adds to the capability of the agency to generate new ideas and design solutions. Consequently, the innovation process is further reliant on knowledge that is based internally. Furthermore, the complementary insights that clients provide in the form of updates, trends and awareness of industries helped agencies to better discern the market for which service solutions are aimed, leading to more customised ideas and designs, which enhance the overall consistency of the process.

#### • Efficiency

The implication of knowledge on the innovation process is further highlighted through the knowledge gained from the feedback of clients that helps many agencies identify issues, and leads to the modification of practices in the process during and after projects:

Participant 7: "It's been a very linear process but our clients don't work like that any more. So our clients want to iterate and they want to try something and see if that works ... we obviously want to work the way our clients want to work but our process doesn't allow for that".

Furthermore, the most current facts received from providers and technology partners on technological trends helps to identify the different and latest technical requirements for solutions. This helps in planning activities and resources in the process in accordance with the requirements, and leads to the overall efficiency of the innovation process. For many agencies this planning is seen as bringing coherence to their innovation, as pointed out by Participant 4: "There's no point in doing ad hoc innovation, you need to understand something before you build it. ... we need to have a firm understanding of the market, the product, how it's delivered for the client before we can start building it".

#### Anticipation and promptness

It is also evidenced that a deeper perception of clients' markets contributes to the comprehensive preparation of innovation. For instance, ideas and designs are generated and carried out faster and are better tailored to the needs of clients. This results in a reduction of the overall timeframe of the innovation process. Furthermore, the deeper perception that several agencies aim at gaining on the wider general environment entails some latent implications that imply an innovation process prepared to anticipate needs.

The implications of knowledge on the innovation process in the small digital marketing agencies are presented in Table 4-38:

#### Implications of knowledge (types) for the innovation process

Flexibility of the process: Shared experiences enable innovation activities to be carried out jointly and connectively, enhancing the flexibility of the process

**Reliance on internal based knowledge: Experiences** gained externally add to internal capabilities of idea generation and design

Consistency of the process:

- Market and digital industry data help develop customised innovations, enhancing the consistency of activities throughout the process
- A deeper insight of the task environment results innovative designs tailored to the needs of clients and customers, enhancing the consistency of the process

#### Efficiency of the process:

- Clients feedbacks lead to the improvement of some practices in the innovation process, enhancing its overall efficiency
- Current digital industry facts enable to identify the newest technological requirements that helps planning activities and resources in the process, enhancing its efficiency

**Promptness: Deeper insight** of the task environment helps anticipate and consequently generate ideas and designs faster, enhancing the overall timeframe of the process

 Table 4-39 Implications of knowledge for the service innovation process in the studied cases (Source: Author)



Figure 4-3 Implications of knowledge for the service innovation process in the studied cases (Source: Author)

#### 4.3.4.3 Implications of structural capital

#### Efficiency

Several agencies believe that systems and organisational practices do not have any implications for their innovation process; this is because they view innovation as an organic and explorative activity. There is also a belief that systems and practices are not beneficial to innovation in small agencies as they prevent straightforward communication across the organisation, as highlighted by Participant 6:

"I don't think they are relevant to innovation, because innovation is still fairly fluid. No, people have a general interest within their own sphere of what they do and are happy to share that with every one else. Or they might speak to someone like a supplier and that leads to some innovation. It's still a fluid and organic process".

However, for the majority, systems and practices have some implications. For instance, organisational practices offer formal steps that help support the planning of tasks and allocation of resources allowing a higher level of tasks to be performed throughout the innovation process. The efficiency of the innovation process is highlighted in the following comment:

Participant 13: "Also, I think if we didn't have them, putting the resource to innovation would be very very difficult because you just wouldn't have the feel, the grasp of what capacity you've got and whether you can afford to put people onto it".

#### • Quality and security

Numerous online operating systems include security data that helps to reassure clients, whilst technical systems and organisational procedures offer quality control that helps minimise human mistakes and develop better quality innovative services solutions. As a result the overall quality and security in the innovation process is reinforced.

#### Interaction

The use of systems, such as Trello, Slack and Google Docs, facilitate a rapid communication and the sharing of up to date documents both across teams and with clients that enables a wider collaboration internally and externally. This generates additional innovative ideas that result in a more interactive innovation process, which is likely to develop beneficial innovative service solutions. Furthermore, many agencies acknowledge that their project management practices invite feedback from clients and consequently permit a thorough execution of the tasks at each stage of the innovation process. This leads to the further tailoring of service solutions, which mean they are even more valuable to clients.

#### • Technical potential

Many systems store past projects with their respective methodology, and past communications with technology partners and other external contacts, which enable easy access to technical knowledge when required throughout the innovation process. This technical knowledge is routinely used as a basic guidance for the design and development of newer service solutions, which means that the technical potential of the innovation process is enhanced:

Participant 6: "From a technical point of view there is probably a process and they have systems in place. Everything is tee'd up and the timeline is developed to deliver a website, for example. So you have the whole process there and someone else with the correct knowledge of the platform could come in and pick it up."

The implications of the structural capital for the innovation process in small digital marketing agencies are presented in Table 4-39:

#### Implications of structural capital for the innovation process

- Efficiency: Systems and organisational practices enable better planning and resource allocation that increases the level of tasks performed, enhancing the efficiency of the process
- Security and quality: Internet based systems and organisational practices optimise data security and provide quality control minimising mistakes throughout the process
- Interaction: Internet based systems help sharing internally and externally, and project management practices gather feedback, consequently the process is more interactive
- **Technical potential:** Systems provide storage and easy access to insight to be used for future innovations, enhancing the technical potential of the process

Table 4-40 Implications of structural capital for the service innovation process (Source: Author)

#### Structural capital



Figure 4-4 Implications of structural capital for the service innovation process in the studied cases (Source: Author)



Figure 4-5 Understanding the dynamic between social, knowledge and structural capital in the studied cases (Source: Author)

The above Figure 4.5 illustrates the elements of social, knowledge and structural capital identified from the findings.

### 4.4. Discussion

#### 4.4.1 Nature of the innovation process

The findings from the cases study show that agencies use an innovation process to develop digital based service solutions. The innovation process, comprising three overall stages, initiation, expansion and implementation, was found to be sequential since most often the approval of clients is required in between activities throughout the process. Nonetheless, some of the activities could still be simultaneously executed, particularly in the first stage of the process. The consecutive construct of the innovation process is similar to the models of Robertson (1974) and Utterback (1971) who present a consecutive process in their respective works on technological

based innovation. However, it also contrasts with the claim by Drejer (2004) that the innovation process in services cannot be consecutive. This finding draws attention to the technical nature of the services offered by the digital marketing agencies and the activities involved in generating innovative service solutions.

Knowledge was found to have some implications for the innovation process. For instance, up to date trends on digital technology helped identify the latest technological requirements, which helped an effective planning of activities and resources that led to a more efficient innovation process. Moreover, there was evidenced that a lack of shared experiences contributed to innovation activities being carried out separately and unconnectedly in the agency, which meant that the process was less flexible. This implication of knowledge is consistent with Utterback (1971) and Robertson's (1974) recognition of the function of knowledge in the process of innovation, which is represented in their models. However, whilst Utterback and Robertson consider only the role of knowledge from the perspectives of science and technology, the findings underline the role of a creative and nonmeasurable type of knowledge, encompassed in expertise, along with the role of a deeper insight of the task and wider environment, both of which also carry some implications for the innovation process. For instance, technical and creative knowledge gained from work experiences with other digital marketing agencies added to the internal capabilities of agencies that could be exploited for future innovations, consequently enhancing the reliance of the innovation process on internal based expertise.

The ties of agencies with their task environment and the knowledge generated from these have some implications for the innovation process. This finding reinforced the acknowledgment in the model of Utterback (1971) of a flow between the task environment and organisations. Similar to Utterback the flow identified amongst the cases encompassed face-to-face discussions and technical-related resources. However, there was evidence that agencies rely on more recent technology applications, such as Google Doc and Slack, to interactively communicate with their task environment. These technologies enable a continuous and instantaneous exchange of knowledge and information throughout the process, as opposed to the successive exchange at defined stages of the process highlighted by Utterback.

300

The reliance of the innovation process on the task environment is reflected in the model of Van de Ven et al (1999), which incorporates the relationships that organisations develop with other organisations, competitors and government agencies. However, their process, like that of Utterback (1971) and Robertson (1974) do not consider relationships with clients. This contrasts with the findings of this study, which shows that clients actively collaborate through communication, providing feedback, ideas and their knowledge of industry. The findings support the recognition of Drejer (2004) on the role of clients in the service innovation process. However, they provide further understanding of the implications that client relationships have for the process, such as enhancing its consistency by developing innovative solutions that are better tailored to their needs.

The above findings highlight that the innovation process in small digital marketing agencies is reliant on the task environment as well as the internal environment. This differs from the service innovation process models of Bowers (1989) and Edgett and Jones (1991) developed in large service organisations, which encompassed components and activities only related to the internal environment, such as business strategy and research, analysis and assessment.

Finally, the results indicate that the participation of clients and the interaction and collaboration internally and externally through the use of web-based applications enable agencies to carry out activities in the process compactly with the possibility of immediate adjustments. Therefore, the consecutive innovation process is made open and adaptable to the changing circumstances that emerge during the innovation of service solutions, which contrasts with the argument of Van de Ven et al. (1999) that the complexity of innovation does not allow for a consecutive innovation process.

# 4.4.2 Characteristics of social, knowledge and structural capital and their implications for the innovation process

#### 4.4.2.1 Social capital

The findings show that both the weaker and stronger ties that agencies establish with their task environment are beneficial. Weaker ties help to raise their profile and provided opportunities to enter new markets and access human resources and specialisms that they lack. Interestingly, it is other digital agencies with stronger competition that contribute the most. Stronger ties are characterised by closer relationships with more frequent interactions based on commercial motives and service requirements. This helps in receiving technical resources, support and insight, and valuable feedback. These findings reinforce the claim of Granovetter (1992) that the structure of relationships is beneficial.

However, the finding does not support the position of Granovetter that strong ties are inconsequential and less influential than weak ties with regard to innovation. This is demonstrated by the implication that both ties had on the innovation process. Weak ties offer agencies exposure to new ideas, resources and motivation. This input contributes to strengthening their internal skills, allowing the process to be shaped further by internal influences, while being enhanced technically and creatively. Stronger ties provide agencies with reliable technical resources, support and insight from technology partners while the involvement from clients leads to a two-way process that is flexible enough so that activities in the process can be modified. These stronger ties are found to have a seminal implication in the formation of the innovation process through direct participation. This finding supports the argument of Capaldo (2007) that weak and strong ties are positive and should both be regarded as consequential. While the assertion of Capaldo (2007) is made with reference to innovation capabilities in the context of network alliances, the finding shows the significance of both ties with regard to the innovation process in the context of organisations and their task environment.

The results highlight different types of trust in the ties established with the task environment. Trust is largely based on the ability of agencies to deliver the work and is often reinforced by contractual agreements and the implicit understanding of ethical behaviour in the industry. This type relates to the form as a belief, as identified by Dietz and Den Hartog (2006), which implies the confidence of the agencies and their contacts in the relationship and its positive outcome. It was also found that trust is based on the sharing of confidential information; this relates to trust as an action, which Dietz and Den Hartog (2006) classified as disclosure.

Furthermore, these types were in accordance with the strength of the ties, which underlines the dynamic between the structural and relational components of social capital. Weaker ties, which are characterised by their transactional nature and competitive dynamic, are found to lack trust and rely on contractual agreements or a common understanding that an ethical behaviour is necessary to mutually maintain a good reputation in the industry. The suggestion of trust based on contractual agreements reinforces the claim made by Silversides (2001) that small service organisations are often required to operate with their task environment through enforced arrangements and trust.

Whilst contractual agreements are also common practice with stronger ties, a more implicit trust is found that rests essentially on the ability to keep confidential information and the ability to deliver good quality work. This finding supports the findings of Levin and Cross (2004) that competence-based trust is particular to stronger ties for they are able to appreciate the expertise of each other. However, the findings do not identify a benevolent type of trust, which Levin and Cross claim is likely encountered among stronger ties.

Time plays a role since trust is present in the strong ties that agencies have developed with technology partners and partnering agencies over a long period and prior to entering partnership. Moreover, trust is not found with partnering organisations where relationships have been newly developed. Similar to Capaldo (2007) and Cross et al. (2003) the finding shows that interaction over a long time leads to stronger ties and that time enables trust to develop stronger ties. Therefore, as well as shaping the structure of relationships, time acts as a bonding element between the structural and relational components of social capital, drawing attention to the relationship between the two components.

The significant contribution of trust to innovation is highlighted through its implication in shaping the innovation process for instance by strengthening its technical characteristics and creating a two-way process. However, this rests on the direct involvement of stronger ties, which are developed through frequent interactions and closeness based on previous work and reputation. The implication of weaker ties on the process is also highlighted, as the process is reinforced creatively and technically despite a lack of trust. These findings are not consistent with the argument of Moran (2005) that the relational component of social capital contributes more to innovation than the structural component for it is more efficient in explaining innovation related procedures. With reference to the innovation process in agencies it appears that both the relational and structural components equally contribute. Finally, the findings strengthen the use of the multidimensional framework buy Nahapiet and Ghoshal (1998) and their argument to consider the relational and structural components in social capital.

#### 4.4.2.2 Knowledge

Based on the original concepts of tacit and explicit knowledge identified by Polanyi (1966), tacit knowledge was found to be relevant to the innovation process. This was seen with regard to the knowledge gained from working with other agencies that leads to a process further reliant on internal based knowledge or with the technical and creative specialisms of freelancers that strengthen the development phase of the process. While the process model of Utterback (1971) emphasises the implications of explicit technical knowledge, inferring technological and scientific knowledge, the findings of this study also draw attention to the implications of tacit knowledge that is technical as well as creative and non-measurable.

The sharing of experiences was found to be an inherent requirement of tacit knowledge in agencies. This supports the view of Nonaka and Takeuchi (1995) on the application of knowledge sharing, which is indicated in their model of knowledge conversion. Nonaka and Takeuchi identify the sharing of knowledge as a way to create new tacit knowledge however, the findings show that it should also be considered as a forming component and characteristic of existing tacit knowledge that plays a strengthening role in developing new knowledge.

Along with tacit knowledge there is evidence that explicit knowledge is used and indispensable to agencies. Up-to-date facts help to ensure that agencies are more familiar with the task environment and technology, and contribute to innovation by identifying market gaps and substantiating return on investment to clients. Furthermore, explicit knowledge with tacit knowledge have some implications on the innovation process as they lead to the faster generation of ideas and the design of solutions that are tailored to the need of clients. Nonaka (1994) emphasises the value of explicit knowledge over tacit knowledge with the claim that knowledge

becomes beneficial when it becomes explicit. However, the finding highlights the value of both types of knowledge whilst particularly underlining the value of up-todate knowledge, identified as a requirement in a fast changing industry. This supports the claim by Smith (2001) that both tacit and explicit knowledge contribute and are valuable and complementary.

The evidence of a deeper insight amongst agencies of their task environment, and in few cases, of the general environment supports the claim by Scharmer (2001) of a third 'potential knowledge'. Agencies seeking to further understand the fundamentals and implications of the newest technologies, and the needs and behaviours in their task environment are consistent with the argument of Scharmer that organisations are required to be increasingly reliant on self-awareness by developing sensing abilities and awareness of potential opportunities. Smedlund's (2008b) argument that three types of knowledge are necessary to organisations is reinforced.

#### • Individual and collective knowledge

Findings show that explicit and tacit knowledge manifest in agencies individually and collectively, which supports the four-dimensional knowledge matrix of Spender (1994). Similar to Spender, individual explicit knowledge is made available through offline and online documents, and online platforms, while it was collectively reflected through technological and digitally related communities/open source communities where common practice knowledge is shared. At an individual level, tacit knowledge lies in the knowledge and specialism of staff members and external ties, whilst collectively it relies on the act of collaboration, which consolidates individual tacit knowledge during projects. This finding is consistent with the claim of Spender that collective tacit knowledge is embedded in organisational practices and relies on the enactment of the collective. However, the recognition of a third type of knowledge, implies the need to build on this matrix to incorporate six dimensions of knowledge, which is illustrated in Table 4-41.

	Individual	Collective/social
Explicit	<b>Conscious knowledge</b> Facts, concepts, and frameworks that can be stored and retrieved from memory or personal records (personal notes, notebooks)	Objectified knowledge Shared corpus of knowledge (i.e. scientific community) Digital/software development related communities, open source

	Blogs, books, presentation, online platforms and memory	communities
Tacit	Automatic knowledge: Theoretical and practical knowledge of people and the performance of different kinds of artistic, athletic, or technical skills (traditions, community of practice) Technical, creative, business related knowledge of staff members and external ties. (Education and professional development)	Collective knowledge: Embedded in social and institutional practice. Relies on tacit experience and the enactment of the collective Knowledge becomes collective through collaboration during projects
Potential	In-depth insight	Collective in-depth insight
	Combination of tacit, explicit and deeper understanding of the task and wider environment (needs, technology and its implications) in the form of self-awareness and anticipation.	Available through collaboration across agencies in relation to a particular market (clients, consumers) or to the wider environment

Table 4-41 Matrix of six dimensions of knowledge (Source: Author, adapted from Spender, 1994)

There is evidence that tacit and explicit knowledge is generated both through 'trusted strong ties' and 'untrusted weaker ties'. For instance, technical and market facts and updates are made available to agencies through communication with technical technology partners and providers during their support and involvement in projects. The awareness of clients of specific industries also acts as a guiding insight to agencies. Furthermore, additional specialisms are made available to them through their working relationships with freelancers. This validates the claim of Nahapiet and Ghoshal (1998) that knowledge is an intangible resource of social capital.

Furthermore, the knowledge generated is seen as beneficial to agencies and innovation. In some cases providers delivering a specific component of service solutions on behalf of agencies are even found to be the direct innovators of the solutions. This contrast with the argument of Grimpe and Kaiser (2010) that outsourced practices that rely on external based knowledge do not tend to enhance innovation. The finding emphasises the relevance of externally generated knowledge and therefore agrees with the view of Hecker (2012) that external-based knowledge, like internal based knowledge, is valuable to agencies and both are complementary.

#### 4.4.2.3 Structural Capital

The finding supports the distinction made by Edvinsson (1997) of tangible and intangible structural capital for it shows that agencies have both intangible and tangible capital, which has some implications on the innovation process. Tangible organisational knowledge is held in software applications, reports, case studies and guides and related to technical matters and organisational management. In addition to the traditional software applications suggested by Edvinsson (1997), there is evidence of knowledge stored in web-based applications, such as Google Docs, where the processing and access depends on network connections, which implies an organisational knowledge that is not physically present in agencies. In fact, agencies are found to be considerably reliant on free web-based knowledge, such as podcasts and blogs among others, to create organisational value. 'With regard to intangible capital, there is extensive evidence of intangible organisational knowledge held in employees and organisational processes, which rests respectively on good communication, and culture and values.

Based on the framework of Grundstein (2000) on the requirement to capitalise knowledge, the findings show that agencies capitalise on their technical and organisational management knowledge, which is updated and formalised through handbooks and case studies that are easily located and accessible. Furthermore, agencies capitalise on knowledge through organisational processes, as these evolve and are used effectively due to collaborative and learning cultures and values. However, agencies do not capitalise on knowledge held by employees. This is evidenced by their effort to ensure that employees will not leave, which means that the knowledge is not securely maintained and sufficiently formalised. This finding reinforces the argument of Peppard and Rylander (2001) on the need to further solidify the experience of employees and tacit knowledge.

There is evidence that tangible and intangible structural capital is used by agencies to communicate with their task environment. However, developing communication applies primarily to clients and relies on formal processes of account management as well as emails, phones, software and web-based application. These systems and processes are found to be adapted to needs of clients and their operating routines. The dynamic between structural capital, social capital and knowledge is highlighted through some of the processes that agencies adopt that help to develop their relationships with clients. For instance, the communication of explicit technical knowledge in the form of technical guides to clients strengthens the ties as their technical understanding of a particular solution improves, which enhances their trust. The use of web-based applications in communicating updated knowledge during projects is also evidence of strengthening ties as trust is enhanced by agencies that have a clear management of tasks.

	Nature and c	characteristics		
Innovation process	<ul> <li>Client-led (in response to clients' demand)</li> <li>Three core stages: induction, expansion and application stages</li> <li>Participatory (internal and task environment)</li> <li>A sequential development (validation and sign off from clients)</li> <li>Systematic (management practices and project management methods)</li> <li>Flexible (Agile principles)</li> <li>Based on understanding customers</li> </ul>			
Social capital	Weak ties structural	Weak ties relational		
	Other agencies: need-based interactions and complementary. Lack of closeness due to competition Rare interaction outside of projects Freelancers: provide skill resources. Need-based interactions. Lack of closeness due to potential tension and work related issues. Rare interactions outside of projects.	Implicit understanding of ethical behaviour, lack of overall trust due to competition. Limited exchanges, exchange of generic market information. Contractual and protocol based trust. Trust is based on expertise, no access to clients and internal systems.		
	<b>Clients' partners:</b> Relationships are compelled and trading agreements. Lack of closeness as collaboration is not deliberate, no communication outside of projects.	Lack of trust due to competition.		
	Partnering education and not for profit organisations: Relationships provide work opportunities. Lack of closeness due new relationships and to lack 308	Lack of trust due to relationships being new. Based on the expertise (ability to deliver a contract)		

Table 4.42 illustrate the findings from the cross case analysis.

	of leading organisation in joint projects. Communication through social media Occasional interaction outside of projects through and contribution to content.		
	<b>Recruitment specialists:</b> Relationships are transactional. Lack of closeness as not required to deliver contracts, need-based interaction.	Lack of trust due to nature of business, Trust is contractual and based on maintaining mutual reputation in the industry.	
	Strong ties structural	Relational	
	<b>Providers</b> : Relationships are essential to activities of agencies. Frequent interaction due to commercial motives, closeness based on reputation and previous joint work.	Trust in based on expertise; work is a relevant part of solutions, keeping confidential information.	
	<b>Clients:</b> Purposeful long term relationships. Close as socialise with larger clients, direct communication with smaller clients, closeness is intrinsic and compulsory, ethos is relevant, take part in projects. Frequent interactions, as requirement is adapted to client.	Trust is implicit, access to sensitive information, contractual agreements, and time; Trust is based on expertise of agencies.	
	<b>Technology partners</b> : Strategic and dependency based relationships. Close, as two-way relationship, agencies are reliant on their support. Frequent interactions for support and commercial purposes.	Trust is unconditional due to reliance, renowned and well- established partners, and confidential exchanges. Awareness of commercial motivation.	
	<b>Partnering agencies</b> : Relationships are strategic. Ethos is relevant. Close ties as familiar from previous joint work, personal connection. Frequent interaction at individual level.	Trust based on personal connection, established prior to entering partnership, long-term relationships, ability to keep confidential information.	
Knowledge capital	<ul> <li>Expertise: based on experiences, education and professional development, and personal development. Shaped by social capital. Includes knowledge of business and core technical and creative knowledge</li> <li>Market and industry data: Facts on clients business and strategy, competitors and digital technology, consumer behaviours</li> </ul>		
	environment: Understanding of the fundamentals and newest		

	digital technology needs of clients and implications of digital technology, and consumer behaviours				
Structural capital	Physical: Creative and technical knowledge is captured in employees				
	Organisational practices: Phased approach: knowledge is captured in day-to-day practices based on project management and marketing principles. Sharing: the practices rely on communicating knowledge internally (training, collaboration, across hierarchy).				
	Records:				
	<b>Technical focus:</b> Technical knowledge is captured in case studies, technical guides and reports.				
	and guides. Solutions: Knowledge is captured in developed service solutions				
	(websites, marketing campaigns).				
	Software and Internet based:				
	applications provide storage and easy access to knowledge. Provide				
	storage and easy access to knowledge, contributors to collaboration				
	and interactions internally and with their task environment (i.e. Trello)				
	Social media and blogs: Provide storage of knowledge and				
	sources that contribute to developing expertise of employees.				
	<b>Sustaining good communication with the task environment:</b> <b>Conventional and client-facing approaches</b> : Systems (emails, phones, face to face meetings, social media, web based application) and practices (account management)				
	Adapted to clients: communication with the task environment is				
	focused mostly on clients - The use of systems and processes are				
	adapted to the culture and structure of client - Systems and processes				
	contribute to effective communication with clients.				
	Management responsibility: Sustaining communication with clients				
	and the task environment is the responsibility of senior management.				
	Implications for the innovation process				
Social	Potential of the process: ties provide additional resources that     anhance the technical and erective conclusion of the process.				
Capital	(weak and strong ties).				
	• <b>Consistency of the process</b> : ties contribute to understanding				
	target market, which enhances consistency of activities in the				
	<ul> <li>Process (strong ties).</li> <li>Efficiency of the process: feedback leads to amendment</li> </ul>				
	aimed at enhancing efficiency of activities in the process (strong				
	ties).				
	in the process adapting to specific required resources (strong				

	<ul> <li>ties).</li> <li>Structure of the process: A two-way process. Trusted ties with clients lead to proactive participation in the process from both clients and agencies (strong ties).</li> <li>Dependency of the process: Activities in the innovation process are dependent on technology partners and some providers. These external sources become an integral part of the process (strong ties).</li> </ul>
Knowledge capital	<ul> <li>Flexibility of the process: Shared experiences enable innovation activities to be carried out jointly and connectively, enhancing the flexibility of the process</li> <li>Reliance on internal based knowledge: Experiences gained externally add to internal capabilities of idea generation and design Consistency of the process: <ul> <li>Market and digital industry data help develop customised innovations, enhancing the consistency of activities throughout the process</li> <li>A deeper insight of the task environment results innovative designs tailored to the needs of clients and customers, enhancing the consistency of the process</li> </ul> </li> <li>Efficiency of the process: <ul> <li>Clients feedbacks lead to the improvement of some practices in the innovation process, enhancing its overall efficiency</li> <li>Current digital industry facts enable to identify the newest technological requirements that helps planning activities and resources in the process.</li> </ul> </li> <li>Promptness: Deeper insight of the task environment helps anticipate and consequently generate ideas and designs faster, enhancing the overall timeframe of the process</li> </ul>
Structural capital	<ul> <li>Efficiency: Systems and organisational practices enable better planning and resource allocation that increases the level of tasks performed, enhancing the efficiency of the process</li> <li>Security and quality: Internet based systems and organisational practices optimise data security and provide quality control minimising mistakes throughout the process</li> <li>Interaction: Internet based systems help sharing internally and externally, and project management practices gather feedback, consequently the process is more interactive</li> <li>Technical potential: Systems provide storage and easy access to insight to be used for future innovations, enhancing the technical potential of the process</li> </ul>

Table 4-42 Findings from the cross-case analysis (Source: Author)

# 4.5. Summary and link

This chapter presented the findings of the within-case analyses of 13 agencies. For each agency, key characteristics were identified with regard to their innovation process, the structural and relational components of their social capital, their knowledge and their structural capital in the forms of systems and processes. The implications of social, knowledge and structural capital for the innovation process were also examined and presented for each agency.

A cross-case analysis was also presented, which highlighted the similarity and differences in patterns identified across the thirteen cases with regard to the innovation process, social, knowledge and structural capital. Findings were then discussed in conjunction with the literature to bring additional meaning and draw attention to the theoretical implications.

Social Capital	Social Capital				
Quotes from	Link to debate	References	Key learning for		
participants			agencies		
Participant 8: "It is so valuable () we can actually talk to clients about other projects they've done and we can share insights we receive from Google, so we can improve and develop innovative campaigns and other innovative services".	The positive influence of social capital on organisational innovation (innovation process and innovation outcomes).	Tsai and Ghoshal (1998); Molina- Morales and Martínez- Fernández (2010); Subramaniam and Youndt (2005).	Motivation for the senior management to strengthen strategically the development of inter-organisational relationships.		
Participant 3: "It's also about the quality of the relationship you are building, you do have to be close to an extent and work at it () I even have some contacts that have become friends and this means that we've been able to do much more ground breaking work together".	Social capital is multi- dimensional, and encompasses both structural and relational elements.	Nahapiet and Ghoshal (1998); Bolino et al. (2002); Hoang and Antoncic (2003); Kilduff and Tsai (2012); Castro and Roldán (2013).	Agencies need to nurture the quality of inter- organisational relationships and what it generates in addition to the make-up of relationships.		
Participant 2: "Even if we don't really know	Weaker relationships	Granovetter (1973); Smith et al.	Developing contact with less known		

them or trust them, it's positive because we learn how they potentially do things, and new work they potentially do."	(ties) are relevant to organisations. They generate more diverse and new information.	(2005); Webb and Hogan (2002); Carson et al. (2004); Mascia and Di Vincenzo (2011).	parties can generate additional potential learning and information. It also reinforces the need to considering the benefits of weaker inter- organisational relationships.
Participant 11: "We are continually improving whatever we're doing () so making sure that we are developing durable relationships with others who can add value to what we're doing is needed because we are a small business and we can't know everything ourselves".	Strong relationships (ties) are relevant in generating trust, learning and resources.	Gans (1974); Gulati et al. (2000); Levin and Cross (2004); Capaldo (2007).	Strengthening current inter- organisational relationships means that additional organisational benefits can be generated.
Participant 5: "If you are asking about who pushes us and makes us a better agency, who keeps us on our toes, who make sure that we are always one step ahead where possible it's certainly other agencies that we compete with".	Ties with competitors are weak but act as motivator to better perform and innovate.	Webb and Hogan (2002); Carson et al. (2004); Mascia and Di Vincenzo (2011).	Acknowledging the positive influence of relationships with competitors means that these can be strategically use to enhance organisational innovation.
Participant 9: "We see contract you know and we have very thick contracts particularly when we are talking about data and medical data and we are given exposure to what their five year plan might be to be acquiring market	Trust in relationships is based on contractual and enforced agreements.	Silversides (2001); Carson et al. (2004); Ashnai et al. (2016).	In addition to developing trust by fostering the quality of inter- organisational relationships, it is important to generate trust through sound contractual agreements.

shares, you know these are intrinsic keys to how they're gone build their business so we have all the necessary paperwork around that".			
Participant 6: "() they engage us and they trust us to do the very best by them but also to bring a high level of knowledge and expertise and problem solving to the table and to help them meet their targets first and foremost and to help them achieve what they want to achieve personally and in their jobs as well and they trust us to do us".	Trust in social relationships is based on expertise and performance.	Dietz and Den Hartog (2006); Seppänen et al. (2007); Rhys (2010); Jiang et al. (2010).	Encouraging the development and promotion of expertise is essential, which implies some investment in building long-term committed relationships.
Participant 10: "We have one client that is a youth brand to the youth market, they are perfect for digital because we know their customers are the first on, so they are a really good test bed just after having implemented the solution".	Clients' relationships influence specific part stages of the innovation process.	Smedlund (2008a); Jimenez- Zarco et al. (2011).	There is a requirement to understand where in the process relationships are more influential and to strategically manage clients' relationships with regard to the innovation process.

Table 4-43 Social Capital: Quotes, references and key learning (Source: Author)

Supported by references from the literature Table 4.43 highlights the positive influences of social capital on organisational innovation and the innovation process, which presents additional motivations for small digital marketing agencies to consider inter-organisational relationships from a strategic perspective. The multidimensional facet of social capital requires fostering the quality of these relationships in addition to their transactional forms. Since stronger and weaker ties both generate beneficial innovation resources, developing relationships with less known parties and further strengthening current relationships in the task environment is particularly relevant. For instance, ties with competitors, although traditionally weak, positively encourage innovation. Therefore, a deliberate approach to promote competitive ties has the potential to be valuable. Contractual agreements and expertise are known to further trust and help foster effective relationships, which entails the application of sound agreements and the promotion of expertise through long-term committed relationships. Finally, relationships with clients are recognised to be influential to the innovation process. For small digital marketing agencies, this means seeking to establish in which part of the process they add value and to proactively manage them on that basis.

Knowledge capital				
Quotes from participants	Link to debate	References	Key learning for agencies	
Participant 4: "Without the relationships we have in the industry we would not have enough understanding to do all the innovative things we do, although we rely on very talented people here".	Knowledge is both internal and external.	Clearly (2009); Oliver (2013), Kogut and Zander (1992); Schweisfurth and Herstatt (2016); Runquist (2012).	The influence of both external and internal based knowledge needs to be acknowledged at senior level and to be strategically managed in line with innovation.	
Participant 1: "We use both the skills of technology providers and other	Tacit and explicit knowledge from external sources is key to innovation.	Hogan et al. (2011); Haas and Hansen (2007); Herrera et al.	It is relevant to understand the influence of each knowledge (tacit	

providers and also their data () this is very valuable when we develop new stuff in a specific market or we have a specific request".		(2010); Wirtz et al. (2010); Phelps et al. (2012).	and explicit), generated by inter- organisational relationships.
Participant 11: "Technical skills and know-how is massively relevant to us when we develop new stuff. I think there's probably less gear towards traditional education in terms of we're not usually based on people needed specific degrees () we do prefer good skills to academic knowledge".	Tacit knowledge is essential to the innovation process and successful innovations.	Wagner and Sternberg (1987); Brown and Duguid (1998); Basadur and Gelade (2006); Gamble and Blackwell (2001).	There is a need to gain, manage and exploit tacit knowledge from internal and external sources.
Participant13: "We do rely on our own capabilities and all the skills we have in the company, in any shape or form".			
Participant 7: "What we tend to do is look at the user interface and how people interact with digital and that's quite a big emerging area at the moment; it kind combines tech and user experience. So when we are looking at the Internet of things	A third type of knowledge in addition to tacit and explicit knowledge.	Smedlund (2008b); Scharrmer (2001); Snowden (2002).	There is an additional type of knowledge that can be developed to help anticipate needs and perform innovative adapted solutions.

like having a web enable food mixer or whatever it is – is how can people interact with that? what is the purpose of these inventions? So we are ready to expect the next moves".			
Participant 4: "I think we're pretty solid at that at making sure that knowledge is shared and not kept to one person".	The networking and sharing of individual knowledge.	Nonaka and Takeuchi (1995); Grundstein (2000); Subramamian and Youndt (2005).	Sharing practices are essential to develop collective knowledge at organisational level.
Participant 15: " () there are team meetings, so knowledge is shared on a regular basis () knowledge is passed on from one employee to another by the staff meetings".			
Participant 8: "We often exchange knowledge with our clients and they participate but we rarely create something fully together. We are there to provide them with a service".	The co-creation of knowledge between stakeholders and organisations.	Mahr et al. (2014); Kazadi et al. (2016).	There is further potential for the co- creation of knowledge with clients and other stakeholders.

Table 4-44 Knowledge Capital: Quotes, references and key learning (Source: Author)

Supported by references from the literature Table 4.44 highlights that knowledge is both external and internal to organisations, which implies that small digital marketing agencies acknowledge the influence of each at senior management level and consequently manage them strategically with regard to innovation. External sources are essential to obtain tacit and explicit knowledge that is used to innovate. Therefore, there are also implications to understand the influence that each type of knowledge (tacit and explicit) provides. Furthermore, it is recognised that tacit knowledge is key to innovation and the innovation process, which means that giving particular attention to gaining, managing and exploiting tacit knowledge from internal and external sources is relevant. In addition to tacit and explicit knowledge the literature presents a third knowledge, identified as latent (Smedlund, 2008b), which if taken into account helps anticipate needs and consequently perform innovative and adapted solutions. To be further beneficial to organisations individual knowledge needs to be shared and knowledge can also be co-created with stakeholders. This respectively entails a focus on the implementation of sharing practices across agencies and understanding about the further potential for co-creating knowledge with clients and other stakeholders.

Structural capital			
Quotes from	Link to debate	Reference	Key learning for
participants			agencies
Participant 1: "A lot of our knowledge is in our process and in relation to our methodology, so we use it everyday without thinking really and without being aware of it".	Structural capital is tangible (systems) and intangible (practices).	Edvinsson (1987); Stewart (1999); Delgado-Verde et al. (2016); Kianto et al. (2017); Rahim et al. (2011).	This implies developing a strong awareness between tangible and intangible structural capital and the positive resources that both provide.
Participant 3: "We do have solid information we can work with in our day to day job, in reports or briefing sheets that have been done by somebody () the majority of the time			

its' just fairly traditional note taking but I'd say they are essential to our work".			
Participant 4: "We use things like Trello for management of tasks with clients, and () Dropbox and all the normal technology that makes it easier and much better to deal and talk to people () we have seen how positive it is ".	Structural capital (systems and practices) establishes better communications with the task environment	Zangoueinezhad and Moshabaki (2008); Gogan et al. (2015).	The use of additional systems and practices can be explored to enhance communications with the task environment
Participant 7: "She [Managing Director] has always been the one who has been very technical and process orientated, there is massive process orientation here so process and procedure allows innovation to flourish but without the rest of us taking part things are not as innovative as they could be".	Structural capital (systems and practices) has a positive influence on innovation and the innovation process.	Wijayanti et al. (2012); Subramaniam and Youndt (2005); Machado Engelman et al. (2017); McDowell et al. (2018).	To ensure a positive influence, structural capital must be made available to all employees across organisations.
Participant 12: "() although knowledge is shared and is on the intranet and other systems, that's interesting but that's not vital to the business and to our innovation I guess, but the knowledge the four of us	The relevance of structural capital is not often acknowledged.	Edvinsson (1987); Sydler et al. (2014); Gogan et al. (2015); Buenechea- Elberdin (2017).	This implies that the senior management gives additional attention to the relevance of the knowledge stored in systems and practices used by lower level managers and other staff members.

[Senior Managers] have is the important stuff".		

Table 4-45 Structural Capital: Quotes, references and key learning (Source: Author)

Supported by references from the literature Table 4.45 highlights that structural capital is tangible (systems) and intangible (practices), which suggests that agencies develop a solid awareness between both and the resources that each generate. The relevance of structural capital is not often recognised in organisations. Therefore, additional attention from senior management is relevant with regard to knowledge that is generated used and stored in systems and practices across the agencies. Structural capital is also recognised for helping establish better communication with the task environment. For agencies that use primarily traditional systems, this means possibilities to explore the use of additional and more recent systems to develop and maintain their communications.

The following chapter presents the research findings from the expert interviews.

# Chapter 5 – Research Findings and Discussion – Expert Interviews

## 5.1 Introduction

Whilst chapter 4 presented the findings of the within-case and cross-case analyses of thirteen small digital marketing agencies in the UK, this chapter presents the findings of the expert interviews. These were conducted with reference to the third objective of the study, namely to evaluate how small digital marketing agencies in the UK can use social, knowledge and structural capital to enhance their innovation process. The chapter is arranged over two main sections: firstly, the interviewees' backgrounds are presented, which include details of each participant and their relevant experience. Secondly, the analysis of the interview data is presented, which highlights the main patterns identified throughout the interviews, and compares these findings with the literature and the findings of the case studies

# 5.2 Background

A total of 13 experts were interviewed in the fields of digital technology, digital marketing and academia. The interviewing process collected process and interpretative knowledge; this referred to knowledge gained by interviewees from practical experiences and involvement in digital and digital marketing-related subjects and activities in addition to their opinions, interpretations and ideas. This knowledge sought to achieve the objective to evaluate the use of social, knowledge and structural capital by small digital agencies to enhance the innovation process. Details of the 13 experts alongside their respective expertise and positions are presented in Table 5-1.

With reference to the research question 'how can small digital marketing agencies in the UK use social, knowledge and structural capital to enhance their innovation process', the interview process began by ascertaining the nature of an innovation process within a small digital marketing agency. The innovation process patterns were discussed against the characteristics identified in the literature and the findings in small digital marketing agencies. The experts were then asked questions about the characteristics of social, knowledge and structural capital in agencies. Themes were identified with regard to the characteristics of each capital and contrasted against the findings in small digital marketing agencies. This generated ideas for some recommendations to help small digital marketing agencies enhance and increase the efficiency of their innovation process. These recommendations consider the constraints and possibilities within the context in which the small digital marketing agencies operate.

Expert	Expertise and Position
Expert 1	Expertise: Digital tools, service models development
	Position: Digital entrepreneur
Expert 2	Expertise: Digital Technology, SEO and knowledge sharing
	Position: University Lecturer and PhD student
Expert 3	Expertise: Digital consultancy, SEO
	Position: Digital Marketing Consultant
Expert 4	Expertise: Digital marketing consultancy and training
	Position: Digital Marketing Consultant and Coach
Expert 5	Expertise: Digital media and technology application for marketing, knowledge
	sharing
	Position: CEO of Digital Marketing Insight
Expert 6	Expertise: Digital technology, digital marketing
	Position: Senior University Lecturer in Digital Marketing
Expert 7	Expertise: Digital marketing innovation, technology
	Position: University Lecturer in Digital Marketing
Expert 8	Expertise: Digital Developing Solutions
	Position: CEO Digital Development Company
Expert 9	Expertise: Digital marketing planning
	Position: Digital Marketing Consultant
Expert 10	Expertise: Digital marketing
	Position: Digital Marketing Consultant
Expert 11	Expertise: Marketing strategy
	Position: Digital Marketing Consultant
Expert 12	Expertise: Digital marketing
	Position: CEO large digital marketing agency
Expert 13	Expertise: Digital marketing

# 5.3 Findings

As highlighted in the methodology chapter, the experts highlighted the main characteristics of the innovation process that they viewed as effective for digital marketing agencies, and these are presented below.

### 5.3.1 Nature of an innovation process

#### 5.3.1.1 A proactive development of solutions

#### • R&D

A few experts mentioned that successful agencies are characterised by their focus on the innovation of products, as opposed to services, which entails the development of solutions prior to addressing the demands of clients. As one expert explained, the purpose of such innovations is to enhance commercial gains:

Expert 10: "I think that's successful, where you can get repeat business that you can build on. I think otherwise it's just a service innovation, it is just an incremental game and it doesn't get very far".

Experts highlighted that this implies the use of an R&D type of process, which entails the following long-term activities of research and analysis, the experimentation of potential solutions, and internal testing and/or occasional testing with clients. Whilst the R&D innovation process is acknowledged in the literature with regard to product innovation (Robertson, 1974; Damanpour and Wischnevsky, 2006), interviewees indicated that such process are not fully applied in small digital marketing agencies, where the innovation of products is based on informal trial and research and the systematisation of solutions and operational procedures. The reasons given for this are a lack of funding and financial resources, and the short-term nature of the activities of small digital agencies.

#### • Learning

The majority of experts considered a process to be effective when the knowledge gained from and during an innovation is used to improve that process. As pointed out by Expert 1, this helps to enhance the development of subsequent products and service solutions.

"Has the innovation actually moved me on as an organisation? So in the end have I learnt something and if I have learnt something how does that help me better create a new product or service?"

This supports the literature, in which the task environment is recognised for its contribution to knowledge, which is used to improve the innovation process. For instance, feedback, knowledge and information from clients and competitors during an innovation are used to enhance the idea creation and development activities of the innovation process (Jimenez-Zarco et al., 2011; Bergenhdahl and Magnusson, 2015). Furthermore, knowledge gained from customers is viewed as enabling learning that feeds into the innovation process (Koskinen and Vanharanta, 2002).

The findings from the case studies show that feedback from clients during projects and the project review are also used to improve the innovation process. For instance, feedback on issues that arise during projects leads to the modification of some of the process activities. Furthermore, agencies collect feedback from employees in monthly project meetings to identify any particular issues. However, whilst it is clear that, for the majority of agencies, direct feedback from clients is used to improve the innovation process, it remains less clear whether the insights gathered from monthly reviews with employees are discussed and analysed at an organisational level to generate learning to apply and enhance the process.

#### Sharing

A few experts mentioned that an effective process includes the sharing of digital knowledge with the task and the wider environment in order to reach organisations and users that are not proficient in digital. According to one expert, the sharing of knowledge is key to agencies setting a more open culture in the digital marketing industry and linking with other industries. Another added that agencies have a social
duty to share knowledge to help smaller organisations to access and gain digital understanding:

Expert 2: "At the moment, digital marketing agencies use their knowledge for commercial purposes only; they don't use it for social purposes."

For the experts this entails an innovation process with a knowledge dissemination stage. For instance, Expert 5 explained the application of a process with a final step where technical knowledge is distributed to a larger pool of digital knowledge with easy access:

"You know, technical knowledge should be spread across all sectors and industries as not everybody is digitally-minded and savvy, and it would require a particular setup at the end of their process to disseminate some of this knowledge. We've finished the project, we have learned new things, we've develop new things so let share some of it, maybe in a bigger collective that could be accessed easily".

The dissemination of knowledge from the innovation process to the external environment is also highlighted in the model of Robertson (1974) that illustrates both the influence of technical knowledge on the product innovation process, and the contribution of technical knowledge to the environment. Furthermore, Koskinen and Vanharanta (2002) consider the sharing of tacit knowledge with clients necessary to develop interactions, which he claims are contributors to enhancing the innovation process in small technology organisations.

With regard to the empirical findings in small digital marketing agencies, many were found to make technical knowledge directly available to their clients as a way of nurturing good relationships. This knowledge is often sent during the design phase of projects to enhance the client's understanding of the service solution. Moreover, a few agencies were found to be effective at offering technical knowledge to clients and to the wider environment by making it really easily accessible through their website. However, the dissemination of technical knowledge to the wider environment was not found to be part of their innovation process.

# • Flexible

Experts emphasised the need for the innovation process to be flexible, which means being able to promptly take into account and respond to the demands and changes made by clients during projects, the reactions of customers to solutions, and changes in internal circumstances. As highlighted by Expert 9, flexibility is particularly relevant due to that the nature of digital marketing activities, which, on occasions makes communication in the process problematic:

".... digital marketing can be quite labour-intensive because you've got all the different channels, all the different teams working with different channels. You've got the technology aspect of it, which means that you need people with certain expertise. So being nimble and trying to liaise through all the different teams and people during the development of innovative projects can be quite difficult".

This implies a process that allows for the swift and refined development of solutions with a small iteration grounded on the co-operation between different teams and clients, and the use of quality control procedures. Experts also highlighted the use of technology and project management procedures to help efficiently manage the activities in the process:

Expert 12: "We develop, test and amend. I don't know if it is the standard model used by small agencies but that's the way we do it with clients ... so you know we develop quickly making small iterations but for that we rely on techniques and systems that help us control what we do".

Moreover, Expert 8 stressed the importance of organisational structure in encouraging a culture conducive to a flexible process, that allows for faster creativity and the generation of ideas:

"I feel the way that we work has allowed for this whereas if we were a more traditional business where everyone had a specific role to fulfil we might miss people's ... aptitude for something else ... by having such a fluid work structure I feel it does help bring innovation in the process, it does help people being open to explore different areas". Flexibility is stressed in the model of Van de Ven et al. (1999) who acknowledges the emergent nature and complexity of innovation, which is reflected in their non-linear process. Van de Ven et al. (1999) further acknowledge the notion of an adaptable process by stating that the prevision of additional resources in the innovation process enables the agency to conduct the required modifications to the innovative product. Heusinkveld and Benders (2002) also emphasise the relevance of a flexible process in services and stress the use of management procedures to help the planning of resources and activities that reflect the evolving nature of innovation. The findings from small digital marketing agencies showed that, whilst the innovation process is sequential, where clients need to sign off activities once complete, in the majority of cases it is a process that is adaptable, in which rapid alterations are carried out in response to changing demands from clients. This flexibility is also evidenced by the use of project management practices, and by strong collaborations with clients and across teams, which allows for the efficient execution of activities in the process.

# 5.3.2 Social capital

The experts highlighted that the relationships of digital marketing agencies in their task environment have some implications for the innovation process.

# 5.3.2.1 Clients

# • Testing of solutions

There was a general agreement amongst the interview data experts that the main relationship of digital marketing agencies is with their clients. This is based on the fact that agencies are service providers and therefore clients are the funding source of projects, which are consequently delivered in line with their objectives and KPI. Thus, two main roles are identified for clients, which are both beneficial to the innovation process.

According to few experts, the participation of clients in the testing of service solutions enables the quick amendment of solutions during development, if necessary; this makes the process more adaptable to change. One expert from a large digital marketing agency explained that, in some cases, relationships with clients allow for the testing of internally developed-products: Expert 8 "Sometimes we do test with our longer-term clients; so for instance we have this hypotheses we think that this will work we explain to them the pros and cons and we do test with them because you know it could help them rank otherwise if it doesn't then we can fix it. So, yes it is both project base with clients or our own individual tests that are more to see what's happening, what's working but no we do not seek funding for this".

The above comment refers to long-term relationships with clients, which draws attention to the reliance of testing on a partnering type of relationship that is built over time. Another expert added that relationships with clients allow for innovative ideas to be tested during the early process phase of ideas generation; this ensures that the right idea is taken forward for development:

Expert 10: "... they put some page media behind it so very quickly put landing pages together to target as they saw, you know the key word for those services and then start A/B testing on the landing pages just to get the exact offer nailed correctly to see what was of most interest to people in the market".

The findings from small digital marketing agencies show that in order to gather feedback from clients, agencies carry out service solution tests before a launch and implementation. It was also found that clients provide feedback and approve ideas and designs before their development. However, the findings did not offer evidence that clients test innovative ideas or designs with consumers during the early expansion stage of the innovation process. With regard to their own innovative products, it was found that agencies did not rely on clients for testing as their process consists of informal trials that are carried out internally.

## • Co-production

The experts mentioned that the co-production of service solutions with clients is beneficial to the process, since the possibility of sharing supplies to explore, trial and test new techniques and technology leads to an increase in process potential. Coproduction is viewed as an enabler to clients taking additional risks when considering innovative ideas, since this places the client in a better position to evaluate whether the ideas are likely to succeed. Experts also acknowledged that co-production is a sign of change in the culture of relationships, where agencies adjust from the traditional role of provider to become a working partner.

Expert 1: "So I mean, I believe in a model called Wikinomics, which is about 'I share *my IP, I share my talents and skills and we co-produce things together...' So, it's moving away from the notion of I have a product I'm going to hit you over the head until you take my product, into how do you co-produce new ways of thinking".* 

Co-production implies the exploration, trial and testing of new techniques and technology with clients as well as the development/establishment/maintenance of longer-term relationships. Thus, Expert 11 highlighted the need for strong bonds due to an increase in resources and investment by clients:

"The other strength is you can try something, but the weakness is you don't know whether it's going to work. So you have to be inclined to put money into something [where] you don't know if it will achieve it's objective, because you are co-designing. So you need very special clients".

The findings from the small digital marketing agencies highlighted that all agencies exchange knowledge and ideas with their clients during the process of developing innovative service solutions, and that the majority intend to develop partnering relationships with clients. However, no agency was found to co-produce with clients where resources are shared, and exploration, trials and testing are conducted. Similar to the experts, the findings underlined the risk aversion amongst clients when considering innovative ideas.

## 5.3.2.2 Technology providers

## • Resources and support

Experts identified technology providers, such as Google and Facebook, as the second most important relationship for digital marketing agencies. This is because experts recognise that they offer agencies access to resources that are beneficial to their innovation process. They explained that the position of technology providers in the digital industry permits them to understand the transformations that occur regarding digital technology platforms. Therefore, a direct relationship with providers

is viewed as helping agencies to maintain an up-to-date awareness of technological changes and new products, and access appropriate support to embrace these changes, and that this enhances the technical abilities of the process. According to experts, this ability is essentially reflected in the increasing technical features of designs. Expert 3 confirmed the opportunity for agencies to access knowledge on prospective changes:

"You want to have a good relationship with Google because they are the biggest advertising platform and with [a] good relationship you might get access to other data sources that other agencies might not be able to have access to, and might be able to do interesting things, like a preview version of [the] next generation of their platform".

The experts also stated that access both to knowledge on prospective changes concerning digital technology, and support from technology providers helps agencies to generate ideas and designs that are more innovative, while efficiently planning the resources needed for their development. Technology providers, referred to as technology partners by small digital marketing agencies, were also found to provide resources and support.

## Dependency

The majority of experts identify the particular issue of technology providers' commercial agendas and the dependency of agencies on their technology platforms and tools to develop innovative service solutions. A few experts mentioned that there was a need for agencies to explore and use innovative approaches and enhance the value of their offering to clients by developing their own digital platforms and tools. Furthermore, they highlighted a sense of community spirit amongst agencies, who were unified against technology providers:

Expert 7: "... the strengths of agencies generally speaking there is a good community of people because there is especially in terms of the search engine optimisation community there is the feeling that people are all commonly united against the big beast that is Google".

Similarly, the findings from small digital marketing agencies show that relationships with technology providers are relevant and that the majority of agencies have strong

established ties with them. Furthermore, it was underlined that these relationships are beneficial in reinforcing the technical ability of the innovation process, which is also reflected by the increased technical features in new service solutions. The finding also evidenced that agencies are aware of their dependency on technology providers with regard to the tools they need to operate and the on-going update requirements due to recurrent technological changes. However, there was no evidence of the small agencies developing their own technical platforms to reduce this dependency since the mutual benefits generated by the relationships were found to minimise the challenges they present with regard to fundamental limitations.

## 5.3.2.3 Universities

## • Digital expertise

One expert emphasised the relevance of relationships with universities in reinforcing the resources of digital marketing agencies by allowing better access to graduate recruitment schemes. Furthermore, many experts drew attention to the relevance of university relationships in enhancing agencies' digital abilities within the innovation process. They explained that universities are effective in providing support to agencies and participating in the development of their services, and that this is due to their extended knowledge of digital technology. One expert mentioned that the combination of such knowledge with technological skills increase the ability of agencies to generate and develop innovative technical ideas and solutions within the innovation the innovation process.

Expert 6: " ... an agency works with a university to share some research or to understand what's happening out there and that kind of relationship feeds the agency's practice when they develop ideas for services. That's always a good one for an agency to cultivate and get involved with other people who are looking at research".

## Analytics

However, experts added that gaining a deeper understanding of the evolution of technology and technological needs, through predictions and detailed analysis, which is key to the activity of agencies, is potentially difficult to acquire. Therefore,

universities are viewed as able to contribute to agencies by developing their understanding, which is based on their proficiency in analytics:

Expert 3: "... I mean, it might be something that is a bit too out of your comfort zone as a agency to build internally so you could for example partner ... there are universities that do that for a living, so they work with large amounts of data, specially in social sciences, and see what they can extrapolate from there".

Experts described analytics as providing a valuable insight that helps agencies shape their overall organisational strategy and guide them in generating, with more focus and efficiently, innovative ideas and designs in the innovation process.

The findings from small digital marketing agencies demonstrated that the majority of agencies that related to universities did so for the employment of graduates through recruitment schemes; this strengthened their internal skills and knowledge, and the provision of content to courses and programmes. Only one agency was found to be in the process of developing a partnering relationship with a university with the aim of participating in a joint project. However, as the relationship was not fully developed, its contribution to and implications for, the agency's innovation process was not evident. Consequently, the findings did not show agencies with established university relationships where the latters has a direct involvement in the development of agency solutions.

## 5.3.2.4 Peers and other agencies

#### Resources

Experts viewed the development of relationships with peers in meet-up events and conferences as necessary in enabling their acquisition and regular exchange of knowledge and ideas, which subsequently contributes to their building of internal skills. They describe these enhanced skills as positively influencing their expertise across the innovation process. Furthermore, a few experts consider that relationships with other agencies are fundamental to their acquisition of technical resources. This is particularly significant for smaller agencies who can lack the internal resources to perform the development of service solutions.

A similar finding amongst small digital marketing agencies shows that all agencies rely on attendance at external conferences and meet-up events to exchange and develop their knowledge. Whilst, for a few agencies, this entails the Founder/Managing Director establishing relationships with peers on a longer-term basis, for the majority it relates to short-term interactions aimed at acquiring new individual knowledge. Moreover, findings highlight that the agencies rely on the technical resources provided by other agencies throughout the development process for innovative service solutions.

# 5.3.3 Knowledge Capital

The experts underlined different types of knowledge that they recognise as having some implication for the innovation process of digital marketing agencies.

# 5.3.3.1 Market and technology

# • Analytics

Experts mentioned that the activities of agencies rely on their understanding of the latest digital trends and the markets they provide services for. This requires them to maintain good knowledge of these, which is thus based on their relationships with clients and technology providers, and the information they collect internally. However, experts highlighted that such further understanding helps agencies to develop explanations and predictions of markets and behaviours, and consequently enhances their internal operations:

Expert 3: "So if you, as an agency, have the knowledge and insight in-house to see the customer landscape being a B2B or a B2C and have a good idea of where user behaviour is heading then you probably have the foresight to apply that knowledge to improve your own internal processes and tools and develop the right innovative technology platforms and the right process to guide your innovation."

Expert 3 added that establishing predictions means that appropriate management decisions can be made in order to adequately prepare for activities in the innovation process when developing innovative solutions. These steps consequently enhance an agency's efficiency:

"That process can only be improved because your knowledge is used to make it more resourceful ... so, for example in terms of planning, you can put the right resources in place and be properly prepared for what comes and what it demands".

Experts explained that such understanding is enabled by analytics, which implies both analytical and statistical expertise. However, they recognised that this expertise tends to be limited in many digital marketing agencies, as highlighted by Expert 5:

"I'd say also there is also a gap generally.... in understanding analytics and numbers, metrics, you know. Everybody talks about big data but a lot of digital agencies find [it] really had to find people who could interpret everything that is coming out of Google analytics, or Hotjar, or whatever other platforms they use as social metrics".

Similar to the experts, the findings from small digital marketing agencies show that agencies are dedicated to understanding their task environment and the digital industry. Clients contribute to this understanding with market data and their own estimation of customers. The finding also indicates that a few agencies seek to gain some deeper understanding of the fundamentals of digital technology and its implications for customers in particular markets. For a couple of agencies, this also includes the wider environment. A deeper understanding was found to enhance the consistency of the innovation process and reduce its overall timeframe by coherently tailoring solutions to the needs of customers and developing activities faster due to planning. For the majority of agencies this understanding entails specific markets within the boundary of client's projects. However, the findings show a limited strategic use of agencies' understanding of the environment through proactively enhancing the efficiency of internal operations, such as the innovation process. Similarly, the majority of agencies indicate a limited focus and knowledge of analytics, with only a few agencies placing emphasis on more elaborate examinations and interpretations of the environment.

#### Digital expertise

The majority of experts acknowledge the requirement for digital knowledge in digital marketing agencies since it is fundamental to their core activities. However, they recognise that the current lack of such knowledge in the industry has a negative

influence on the objectives of agencies to deliver innovative services, as highlighted by Expert 11:

"I know from experience, having talked to few of them that they had a real skills gap issues straight away trying to find content practitioners or [an] SEO who understood content as much as they did, technical SEO. There is a gap between the ambition to innovate services and finding the people to actually undertake those roles."

Experts explained that a lack of digital knowledge results in a reduction in technical capabilities within the innovation process, which was reflected by the delivery of less ground-breaking solutions to clients:

Expert 13: "If you don't have enough digital skills, or not many, it is simply harder to have an assignment where there is novelty because you can't bring that new technical part, which is often the one needed to be original ... you are not strong enough technically to come up with something original".

The expert who manages a large digital marketing agency added that this compels agencies to hire people with solid technical skills and to make use of their relationships to temporarily recruit reliable technical freelancers and consultants and work with other agencies:

Expert 13: "What we don't always have the skill sets for is more on the development side, so whenever we have pursued projects like this, after we've done the research and contacted our trusted sources, we have brought in some outside help to work out the technology aspect of it".

Findings from small digital marketing agencies show a similar result as they reveal that small agencies are also reliant on their task environment for technical expertise and that they are required to temporarily recruit freelancers, providers and developers as well as work with other agencies to enhance their technical skills.

# 5.3.4 Structural capital

# 5.3.4.1 Internet based systems

## Transparency

Experts mentioned the relevance of online systems that enable agencies to be more transparent with their clients; this use is based on an understanding that transparency increases trust, and encourages clients to perceive agencies as more professional and reliable. These systems contribute to a clearer display of the work in process, as well as a reliable mechanism for communication and the sharing of documents. Experts believed furthered this increases the satisfaction of clients in the innovation process; indeed, Expert 4 stresses the use of systems is a particularity of small agencies:

"Smaller agencies use things like Trello boards or some sort of paid project things, like Basecamp or something like that. That seems to work well because it is allowing you to visually see and add cards, and shows people what they are doing throughout the development process".

Whilst the above underlines the direct implication of these online systems on trust, experts also view that their use results in a more accommodating innovation process, as explained by Expert 5:

"When clients trust the agencies they are more stress-free during the work and more co-operative, there is a better flow and alterations can be made much faster, it makes things go much faster".

The comment draws attention to the potentials for trust to enhance collaboration, and this helps in performing amendments promptly throughout the innovation process. Additionally, experts view that the use of organisational practices and systems lead to a more productive innovation process, particularly at the initial stage, where research and analysis are conducted for they allow agencies to organise, store and effortlessly reuse their collected knowledge.

Expert 1: "So there is quite a lot of structure and systems needed when doing the research at the beginning of the journey. Issues of market research, of data analysis, customer analysis etc, etc, which require [us] to set up different methods to store it all so it can be used more proficiently later on in the development".

The findings from small digital marketing agencies similarly highlight that agencies rely on Internet based systems, such as Trello and Slack, to reliably communicate and share knowledge, both with clients and internally, during projects. In addition to their contribution to transparency, systems were found to enhance the ability for real time reciprocal exchange, which results in an innovation process that is more open and adaptable. However, the use of systems was found to mostly apply to communication with clients.

# 5.3.4.2 Consumers focused practices

#### Collaboration

Many experts view consumers as holders of large amounts of information, and describe them as a good source of long-term knowledge on future happenings in different markets. Therefore, ensuring the collection and effective use of their knowledge requires agencies to establish good communication with consumers. One expert highlighted the use of collaborative practices in order to engage with consumers:

Expert 12: "As far as processes go, I go back to my user experience things and say there is a participatory user experience process that we adapt for each circumstance because having a decent communication with users and involving them is so, so important, and that can be [a] one to one interview thing, like we are doing now, or it can be having a bunch of people in a room".

Collaborative practices, which entail the conduct of participatory workshops, are positively viewed for their contribution to learning in agencies, in addition to their opportunity to gather valuable knowledge. Moreover, experts explain that, with such practices, agencies are able to generate ideas in situ that can be tested instantly, as opposed to ideas that are generated internally and are not tested.

Expert 11: "It very much was like that beforehand ... 'don't worry you lot we'll come back to you with a whole bunch of ideas' and they usually actually stick with the ones that they thought was the best themselves, whether it goes well with everyone else or not. That's why the rise of user experience has been a good thing because we can talk to proper users about those ideas earlier on and get on with the development".

According to experts, the prompt generation of ideas for testing with consumers leads to a process that is more internally participatory; this was indicated by the above comments. Moreover, the involvement of consumers supports the view previously highlighted by experts on the positive implications for client testing at the initial stage of the innovation process; they explain that this is as a contributing factor to an adaptable process.

The findings from small digital marketing agencies show that agencies pay considerable attention to understanding consumers in their innovation process in order to support the design of their service solutions during projects. This is demonstrated with their gathering of data through traditional primary research methods and secondary sources as well as, in some cases, the compilation of detailed consumer profiles. However, agencies did not make reference to the use of collaborative practices to gather knowledge with a closer involvement of consumers in the innovation process. Thus, the nature of an effective innovation process in small digital marketing agencies highlighted by the experts are summarised in Table 5.2.

# Nature of an effective innovation process

- R&D: An innovation process that focuses on innovating products for clients with the aim to enhance profits. Implies a process that includes activities such as longterm research and analysis of market, as well as testing throughout the process internally and with clients
- Learning: An innovation process where knowledge gained is purposefully analysed and use to improve the process
- **Sharing:** An innovation process that shares knowledge with the task and the wider environment to reach users who are not digital proficient
- Flexible: An innovation process that promptly acknowledges and responds to demands and changes from clients, feedback from customers and internal circumstances

Table 5-2 Nature of an effective innovation process (Source: Author)

The characteristics of social, knowledge and structural capital in small digital marketing agencies highlighted by the experts are summarised in Table 5.3

Characteristics of social, knowledge and structural capital and implications for the				
innovation process				
Social capital	Clients: Testing of solutions with clients enables amendments of solutions during the development that results in the process being more adaptable to changes Co-production with clients enables the sharing of resources that leads to an increased potential in the process Technology providers: Resources and support of technology providers increase the technical potential in the process reflected in the increased technical features of services. Dependency of the agencies on technology providers leads to lower value of services Universities: Universities: University provide digital and analytics expertise that increases the technical potential in the process and gives a focused guidance that enhances the efficiency of the process Peers and other agencies: Resources: exchanges of ideas and knowledge enhance internal skills and avantice across the process			
Knowledge capital	Market and technology: Analytics help agencies develop predictions of markets, which enhance the efficiency of the process, as planning is made. Digital expertise helps agencies enhance technical capabilities of the innovation process.			
Structural capital	Internet based systems: Online systems enable clients to visualise innovation activities, which enhances transparency throughout the process. Consumers focused practices: Collaborative practices with consumers enable to gather valuable knowledge and learning, leading to more participation in the process. Ideas can be tested more promptly, which makes activities in the process more adaptable.			

Table 5-3 Characteristics of social, knowledge and structural capital and implications for the innovation process

# 5.4 Recommendations

Based on the findings from the interviews conducted with experts and from the exploration of the small digital marketing agencies, the study identified several recommendations with regard to social, knowledge and structural capital aimed at enhancing the innovation processes of small digital marketing agencies in the UK.

#### 5.4.1 Social capital

#### 5.4.1.1 Clients

The testing of service solutions by clients was found to make the innovation process more adaptable by allowing the performance of rapid amendments during the development phase, whilst experts considered adaptability a key characteristic of an effective innovation process. Consequently, the study recommends that small digital marketing agencies undertake more testing with their clients throughout the process, at the phases of idea generation, design or development, in addition to the current testing completed at the implementation stage of the process. This requires agencies to be positively disposed toward a greater involvement of clients in the process, through the fostering of longer-term commitment. Whilst the nature of the activities of small digital marketing agencies lie on short term commitments, the findings from the small digital marketing agencies highlighted that a few agencies were already seeking to develop (and developing) longer term partnering relationships. However, the implication for many agencies is to establish closer relationships through active and engaging communication and to create additional shared experiences over an extended period of time. Further involvement from clients would help agencies to better demonstrate the potential for innovative solutions; this could consequently lessen the adversity of clients to innovate, which was recognised as a key issue.

The sharing of supplies with clients and agencies results in an innovation process with increased potential. Therefore the study recommends that small digital marketing agencies seek to establish relationships of co-production with their clients where resources can be shared. This would stimulate the possibilities during the project to explore, trial and test new techniques and technology. This would be in addition to the current benefits that the close relationships with clients currently offer, which is guidance, feedback and knowledge of industries. Additionally, the increased resource potential from involving clients would lead to more flexibility in the process as changes could be made more easily and promptly. This is linked to the involvement of clients in the testing of solutions, which has positive implications for the process, which were previously acknowledged. Consequently, agencies need to 'educate' clients on taking more risks with regard to innovation by inviting them to further access the process to evaluate the potential success of innovative ideas and subsequent solutions. Similar to client testing, this implies working on relationships to achieve long-term partnering ties with a particular focus on developing solid trust. As evidenced in a few cases trusted relationships with clients were key in enabling agencies to be proactive with their suggestions on innovative design, development and implementation, since trust gives clients increased confidence in their expertise.

In the majority of cases, the relationships between the agencies and their clients were found to depend on the type of relationships that clients sought to establish, and that trust relies on the expertise of agencies and contractual agreements. However, in a few agencies, relationships were purposefully established with clients of a similar ethos, which were found to contribute to a closer relationship. Therefore, the study recommends that agencies focus on developing relationships of co-production with trusted clients of a similar ethos, who have displayed confidence in their expertise.

## 5.4.1.2 Technology providers

The interviews with experts and the small digital marketing agency cases highlighted the benefits of relationships with technology providers through their provision of technical support and knowledge. This was found to enhance the technological abilities of the innovation process, which was reflected in the increased technical features of the solutions. Furthermore, both findings acknowledged the dependence of agencies on technology providers on whom they rely to develop digital tools and solutions. Whilst experts view the creation of technological platforms as a way for digital marketing agencies to break away from technology providers, where limited financial and technical resources were evident, the findings in the cases studies, implied that this development was unlikely. This means that small agencies remain fully dependent on technology providers. However, the study recommends that some of the knowledge gained by the agencies from the technology providers during the development of innovative solutions is shared at the end of projects with users from the task and the general environment who are not proficient in digital technology. This recommendation is based on the view from experts that knowledge sharing is a characteristic of an effective innovation process.

# 5.4.1.3 Universities

The findings from the expert interviews underlined the extensive knowledge of the digital industry and digital expertise of universities, and that their involvement with agencies increases the capability of the innovation process to develop innovative solutions. Several small digital marketing agencies were found to relate to universities with the aim of recruiting graduates and partnering institutions in order to access specific markets. However, based on the limited focus of agencies on such relationships, where universities provide digital expertise and knowledge, the study suggests that small digital marketing agencies give more attention to establishing relationships with that particular aim. The evident difficulty in accessing technical skills in the industry and the need to rely on the task environment renders the involvement of universities an attractive prospect in light of their consequent contribution to the enhancement of the technical resources within the innovation process an attractive prospect. Furthermore, this provides opportunities for agencies to gain additional knowledge and expertise that can be processed internally and reused at a later stage in the process, which contributes to the development of the learning innovation process, which experts characterise as effective.

# 5.4.1.4 Peers and other agencies

The relationships with peers at conferences and meet-up events, and the relationships with other agencies that enable small agencies to work collaboratively, allow for the collection of knowledge and ideas, and the strengthening of expertise through practical experience. All of these elements enhance the technical and creative abilities within the innovation process. However, only a few agencies were found to feed back such knowledge internally, thus the study recommends that agencies focus on ensuring the development of organisational practices to capture and process knowledge and practical experiences gained externally from peers and other agencies to further nurture the innovation process. This knowledge, when

applicable, could be applied throughout the process during projects, which would also result in the shaping of the learning innovation process.

#### 5.4.2 Knowledge capital

#### 5.4.2.1 Analytics

The findings from expert interviews underlined that the examination and interpretation of data contributed to the enhancement of an efficient innovation process since they enabled agencies to explain and predict future demands and changes, and consequently adopt the right internal management approaches. Therefore, the study stresses the need for small digital marketing agencies to foster and make further use of analysis, which implies the development of their analytical expertise. However, the majority of cases did not demonstrate a strong focus on using detailed analytical methods; as such, the study recommends that agencies consider partnering with universities, which were characterised as proficient in analytics. This recommendation is deemed appropriate given the limited technical resources of small digital marketing agencies and the recognition of a lack of industry-wide analytical expertise. Furthermore, this agrees with the previous recommendation to establish relationships with universities, which could give access to valuable technical expertise and enhance the technical capabilities within the innovation process.

Clients were acknowledged to provide small digital marketing agencies with data on markets and customer trends that help them to make sense of the markets for which their service solutions are developed. Gaining prospective access to additional data to carry out detailed analytical manipulations as well as to analyse data implies a broader sharing of resources with clients, which reinforces the recommendation that small digital marketing agencies establish relationships of co-production with clients.

The study sees the adoption of an organisational approach that emphasises the interpretation of data and anticipation of trends, and future changes as enabling agencies to approach clients with previously developed solutions, as opposed to solutions developed in response to clients. Consequently, the innovation process

would evolve from a process that is reactive and client-led to a process that is proactive and revenue enhancing.

# 5.4.2.2 Technical knowledge

Technical knowledge in agencies was found to have some implications for the innovation process since experts believe that a lack of technical knowledge reduces the digital capabilities of the process, which as a result, restricts the delivery of original service solutions to clients. Amid the lack of technical skills in the digital marketing industry, it is fundamental that this knowledge is assured as much as possible in small digital marketing agencies. Therefore, the study recommends that small digital marketing agencies continue to develop and deepen their relationships with their task environment with a broad understanding of the benefits that they provide, as shown by the finding that ties were established with other agencies, providers, technology providers and freelancers, among others. These relationships are fundamental to ensuring technical resources, which as a result, positively influence the innovation process, as previously acknowledged. The previous recommendation to establish relationships with universities with regard to analytics is also validated here since small digital marketing agencies will additionally benefit from their extended technical knowledge during the development of innovative service solutions.

## 5.4.3 Structural capital

# 5.4.3.1 Use of online systems

The findings from the expert interviews showed that the transparency generated by the use of online systems and organisational practices enhance the trust of clients in small digital agencies. This allows for better co-operation where prompt amendments can be made, and knowledge can be better organised with reference to its storage and reuse; as a result, this can improve the flexibility and efficiency of the innovation process. Similarly, the cases studied evidenced the use of systems that lead to greater transparency and increased flexibility within the innovation process. Therefore, the study recommends that small digital marketing agencies sustain the practice of using online systems, both with clients and internally, during projects to enable fast interaction during projects and as overall good practice in communication. Furthermore, the study recommends that agencies extend and strengthen the practice of using online systems with other contacts from the task environment. These could include providers and technology providers, who are found to have implications for the innovation process and where communication is conducted through more traditional means, as a way to establish and maintain good contact and consequently enhance trust.

#### 5.4.3.2 Collaborative practices with consumers

The use of collaborative practice in large agencies to gather ideas and feedback on ideas, designs and developed solutions from consumers was found to help engender an innovation process that was internally participatory and flexibly enhanced; this is because the direct involvement of consumers at an early stage of the process means that innovative ideas can be generated and tested simultaneously. Furthermore, the evident focus of the small digital marketing agencies studied was to gain knowledge from consumers and understand them better. However, in contrast to clients, there is a lack of evidence concerning collaborative approaches with consumers, and this could be a motivation for small digital marketing agencies to consider adopting such practices. Nonetheless, consideration must be given to time and resources (human and financial) constraints. Therefore, the study recommends that, in first instance, agencies carry out an exploration of the concept of collaborative practice and its implications to gain some understanding of the requirements and subsequently the viability for incorporation at an early stage of the innovation process. The implications for direct involving consumers are consistent with the implications for involving clients in for flexibility and testing throughout the innovation process. Thus, the incorporation of clients previously highlighted, which therefore validates both was recommendations.

A summary of the social capital, knowledge and structural capitals and their implications for the innovation process, as viewed by the experts, is presented in

Table 5.4 and compared with the findings from the case studies. The subsequent recommendations are also presented.

Capital	Experts	Small digital marketing agencies	Recommendations
Social capit	al		
Clients	The testing of solutions by clients throughout the innovation process leads to a process that is more adaptable to change as service solutions can be promptly amended following testing by clients.	Agencies do not carry out the testing of solutions with clients prior to the implementation stage of the process.	Agencies need to undertake testing with clients throughout the process, not just prior to implementation. This implies a disposition for a greater involvement of clients by fostering long-term commitment through closer relationships and additional shared experience over time.
	Relationships of co- production with clients enhance the resource potential of the innovation process as resources are shared to explore, trial and test solutions.	Agencies do not have relationships of co- production with clients where resources are shared and exploration, trials and testing are conducted.	Digital agencies must seek to establish relationship of co- production with clients of similar ethos, where trust is present and where resources can be shared. This implies 'educating' clients on taking more risks to innovate by developing long term

Technology Providers Technical providers offer support and access to knowledge on prospective changes in digital technology that enhance the technical and innovation ability of the innovation process. Technical providers offered support and knowledge that enhances the technical ability of the innovation process partnering relationships with a particular focus on trust.

Agencies are recommended to share some of the knowledge gained from technology providers at the end of the process with users from the task and general environment who are not specialised in digital.

Agencies are recommended to give further attention to establishing relationships with universities aimed at gaining additional technical and knowledge resources.

Agencies are recommended to focus on ensuring the development of practices to capture and process knowledge internally that can be reused

Universities Universities have knowledge of the digital industry and analytical expertise. Their involvement improves the ability of the innovation process by generating technical ideas and designs.

partner with universities to develop service solutions. Universities do not have a direct involvement in their innovation process.

The agencies do not

Peers and The exchange of ideas other and skills with peers agencies and other agencies contribute to extending knowledge internally that is used in the innovation process. Agencies rely on external events to increase their knowledge that contributes to extending knowledge internally. Their collaborative working with other agencies provides technical resources during the process and

		leads to new internal imputes that improve the technical and creative capabilities of the innovation process.	posteriorly throughout the process.
Knowledge	capital		
Analytics	The efficiency of the innovation process is improved as the use of analytics allows agencies to anticipate changes in the digital industry and technology that leads to appropriate preparation of the activities in the process	The majority of agencies do not use detailed analytical methods to explain and anticipate changes with regard to the digital industry and technology.	Agencies must foster and make use of analysis, which implies developing analytical expertise. For this, agencies are recommended to partner with universities, which have expertise in analytics.
Technical knowledge	Lack of technical knowledge reduces the technical capacities of the innovation process.	Many agencies rely on technical knowledge from sources in the task environment.	Agencies are recommended to continue developing and deepening relationships in the task environment that provide technical resources and to focus on establishing relationships with universities for their extended technical knowledge.
Structural ca	apital		
Online	The use of systems	Agencies use online	Agencies are

systems	enhances trust from	systems with clients	recommended to
(i.e. Trello,	clients that leads to	during projects that allow	continue with the use
Basecamp)	collaboration where	fast communication and	of online systems with
	amendments can be	sharing of knowledge.	clients and to extend
	performed promptly,	This leads to better	and strengthen this
	which results in a	communication and	practice with other
	process that is more	flexibility in the activities	contacts in the task
	flexible.	of the innovation	environment.
		process.	
Communicati	The use of	Agencies do not use a	Agencies are
-on with	collaborative practices	collaborative approach	recommended to
consumers	with consumers	with consumers to gather	explore the concept of
	allows employees to	feedback and ideas from	collaborative practice
	collect and test ideas	consumers throughout	and their implications
	simultaneously, which	the process.	in order to gain a
	enhances internal		deeper understanding
	participation within the		on their requirement
	process and also its		and their viability to be
	flexibility as		included throughout
	amendments can be		the innovation
	made promptly.		process.

Table 5-4 Implications and recommendations - Experts and case studies (Source: Author)

# 5.5 Summary and Link

This chapter has presented the findings from the expert interviews that focus on evaluating how small digital marketing agencies in the UK can use social, knowledge and structural capital to enhance their innovation processes. Firstly, a short background was offered that provided insight on the expert panel interviewed with their relevant experience detailed. Secondly, the analysis was presented, which consisted of identifying and discussing the characteristics of an effective innovation process in digital marketing agencies. Subsequently, the themes were identified with regard to social, knowledge and structural capital and the innovation process, which were contrasted against those from the cross-case analysis. These comparisons helped to generate recommendations aimed at enhancing the innovation process.

The key learning from Table 4.43 supports some of the above recommendations. The motivation for agencies to develop inter-organisational relationships from a strategic perspective shapes the recommendation for small digital marketing agencies to establish long-term commitment to clients and increase their involvement to enable the testing of service solutions throughout the innovation process. It also shapes the suggestion to intentionally establish relationships of co-production with clients, in which resources can be shared. Furthermore, the notion of developing relationships with universities with the particular aim to gain access to technical knowledge is reinforced. The reference to the benefits of weaker ties to organisations and the indication that developing contacts with less known parties and competitors generates additional resources also supports the recommendation that small agencies should work collaboratively with other agencies to collect new knowledge.

A new recommendation emerges from the key learning on the multidimensionality of social capital that small digital marketing agencies give particular attention to the quality of their inter-organisational relationships. A particular attention should be given the intentional building of trust with stakeholders and other parties from the task environment. This potentially implies a broader awareness of the concept, its nature and characteristics.

The key learning from Table 4.44 also supports some of the previous recommendations. The significance of both tacit and explicit knowledge from external sources to innovation entails small digital marketing agencies to understand the influence of each type that is generated by their inter-organisational relationships. This reinforces the previous consideration on the understanding of the influence of analytics (tacit knowledge) and the suggestion to develop analytical skills and expertise through relationships with universities. The particular relevance of tacit knowledge to innovation is a motivator to its acquisition, management and exploitation. This point validates the recommendation that agencies share the technical knowledge and expertise received from technology providers at the end of projects, to enhance the effectiveness of their innovation process. Furthermore, the

350

focus on fostering a form of knowledge additional to tacit and explicit that helps to anticipate trends and changes supports the recommendation to adopt organisational approaches to proactively provide service solutions, which also relates to the concept of analytics.

The potential for small digital marketing agencies to co-create knowledge with clients and other stakeholders is an incentive, which generates a new recommendation. Hence, the study recommends that small digital marketing agencies seek to further engage in the co-creation of knowledge with stakeholders. With regard to clients, this suggestion needs to be acknowledged in the context of the recommendation to intentionally establish co-production with clients, in which resources can be shared.

Similarly, the key learning from Table 4.45 supports some of the previous recommendations. For instance, the understanding that additional systems are available to small digital marketing agencies to further enhance communication with the task environment reinforces the recommendation on the practice of online systems (i.e.: Trello, GoogleDocs, Dropbox) usage to communicate with clients and other potential stakeholders. Finally, the acknowledgement that to be influential structural capital is required to be prevalent across the organisation leads to the recommendation that senior management in small digital marketing agencies understand and concede the beneficial influence of systems and practices across the different levels of the organisational structure. This implies access, sharing and management by all.

The following chapter presents the concluding comments to the study.

# **Chapter 6 – Conclusions**

# 6.1 Introduction

Chapter 5 presented the findings from the analysis of expert interviews and the recommendations aimed at enhancing the innovation process in small digital marketing agencies in the UK. This chapter presents the conclusions to the study and is structured into the following sections: firstly, the objectives of the study are considered and a summary of key results are presented; the next section outlines the limitations of the research and highlights future research, and finally, the contribution of this study to the field of research is specified.

# 6.1.1 Summary of the aim and objectives of the study

The aim of the study was to understand and gain insight on the innovation process in small digital marketing agencies in light of social, knowledge and structural capital. Findings were used to provide recommendations that were intended to strengthen the innovation process in that context, whilst the aim was divided into the following four objectives:

- a) To identify the nature of the innovation process in small digital marketing agencies in the UK
- b) To identify the characteristics of social, knowledge and structural capital in small digital marketing agencies in the UK
- c) To examine the implications of social, knowledge and structural capital for the innovation process in small digital marketing agencies in the UK
- d) To evaluate how small digital marketing agencies in the UK can use social, knowledge and structural capital to enhance their innovation process

## 6.1.2 Summary of key results

With reference to the first objective of the study, namely to identify the nature of the innovation process in small digital marketing agencies in the UK, the findings emphasised that, due to their technical nature and the technical nature of the innovative service solutions, small digital marketing agencies rely on an innovation process that is sequential. This was characterised by a three overall stages process

(initiation, expansion and implementation) that encompassed different activities, such profiling of customers, generation and validation of ideas and testing of solutions, among others, that required to be validation and signed off from clients. The findings showed that, in addition to technical knowledge, which implies knowledge that is measurable, the innovation process is reliant on creative knowledge. Recent online applications were found to play a fundamental role in shaping the innovation process over and above face-to-face discussion and more traditional applications, and they all allow a continuous flow between the innovation process and the task environment. There was evidence of the role of clients in the innovation process as their participation leads to a greater consistency in the innovation of solutions because they are better tailored to their needs. These findings stressed the reliance of the innovation process on the task environment, aside from the internal environment of small digital marketing agencies. Furthermore, they helped to highlight that small digital marketing agencies use an innovation process that is consecutive, whilst open and adaptable to the unexpected challenges and demands that are encountered in the innovation of service solutions. This finding contrasts with the current literature that service innovation processes are not sequential.

With reference to the first and second objectives of the study, to identify the characteristics of social capital in small digital marketing agencies and examine the implication for the innovation process, the findings showed that weak ties and strong ties have some influence by, for instance, strengthening the process creatively and technically, or enhancing its consistency. This highlighted that the structure of relationships developed by small digital marketing agencies with their task environment was beneficial, which underlines that both types of ties need to be regarded as consequential. There was some indication that agencies operate with weaker ties based on required trust and particular arrangements, which are due to the competitive dynamics and transactional nature of such relationships. Trust in stronger ties is more implicit and founded on the ability to deliver good quality work, which was identified as competence-based trust. The dynamic between the structural and relational components of social capital was highlighted through time, which plays a bonding role since the strength of ties is enhanced by interactions that take place over a long period of time, which helps to develop trust. Finally, both structural and

relational components were identified as having implications for the innovation process, which strengthens the argument that they need to be regarded as integral components of social capital.

With reference to the first and second objectives of the study, to identify the characteristics of knowledge in small digital marketing agencies and examine its implications for the innovation process, the findings identified that agencies use and rely on tacit and explicit knowledge. The findings stressed that tacit knowledge does not purely refer to technical knowledge but also to creative knowledge, which is difficult to measure. Sharing experiences, both internally and with the task environment, was found to be a key feature and a forming component of tacit knowledge; it therefore adds to the current recognition of knowledge creation. Both tacit and explicit knowledge were found to have some implications for the innovation process by allowing for the development of innovative ideas and creating an added reliance on internally-based knowledge. This underlines the need to regard tacit and explicit knowledge as complementary, but with the recognition that their value lies in being up-to-date. There was evidence of knowledge at both the individual and collective levels, with tacit knowledge only discernible collectively through joint collaboration. A third type of knowledge was identified in addition to tacit and explicit knowledge and it was established that all three types are necessary for small digital marketing agencies. This highlighted the implications for a matrix encompassing the six dimensions of knowledge: Explicit Individual, Explicit Collective, Tacit Individual, Tacit Collective, Potential Individual, Potential Collective. Finally, knowledge was found to be an intrinsic resource of external social capital beneficial to agencies and therefore viewed as complementary to internally-based knowledge.

With reference to the first and second objectives of the study to identify the characteristics of structural capital in small digital marketing agencies and examine its implications for the innovation process, the above findings acknowledged that the structural capital of agencies is both tangible and intangible. This was characterised by organisational knowledge being contained in tangible records, such as guides and handbooks, as well as software and web-based applications, such as blogs and social media. Organisational knowledge was also contained in intangible practices and in employees, which are respectively grounded in culture and moral codes, and

good communication. The findings showed that agencies capitalise on organisational practices that are effectively used, as well as technical and management knowledge that are formalised and accessible, whilst there was evidence of the need to further solidify the experience of employees and tacit knowledge. Practices and systems are used to better communicate with external ties, although this relates predominantly to clients, and are adapted and used according to their needs. Finally, the above findings provided further understanding on the dynamic between structural capital, knowledge and social capital. This was identified, for instance, by the potential that practices and systems offer for better communication with clients, since sharing explicit knowledge during projects contributes to developing trust due to the perception of agency competence in project management practice.

With reference to the third objective of the study, namely to evaluate how small digital marketing agencies in the UK can use social, knowledge and structural capital to enhance their innovation process, several characteristics were first identified concerning effective innovation processes in digital marketing agencies. These include: a process focused on product innovation to enhance profits, a process that evolves by integrating knowledge gained during innovation; a process that shares knowledge gained during projects with users not specialised in digital, and a process that is flexible and rapidly responds to demands, feedback and changes. Additionally, several recommendations were made. With regard to social capital agencies were recommended to foster longer-term commitments with clients through closer relationships and shared experiences in order to extend their involvement in the process to carry out testing. Testing was viewed as a contributor to an adaptable process where amendments can be promptly made. Furthermore, agencies were recommended to establish relationships of co-production with clients for shared supplies, enhancing enhanced the resource potential of the process that allows for exploring, trialling and testing innovative ideas, and designing and developing solutions. Recommendations were made about sharing the knowledge gained from the relationships with technology providers at the end of the process with the task and general environment to evolve a knowledge sharing process. Relationships with universities were found to generate innovative technical ideas and designs in the process and therefore agencies were recommended to develop partnering relationships aimed at benefiting from this knowledge and expertise in the process.

355

With regard to knowledge capital, recommendations were made to develop analytical expertise and accordingly partner with universities, which have expertise in analytics. Analytics were found to help anticipate changes in the digital industry and adopt appropriate measures with regard to the innovation process. Furthermore agencies, agencies were recommended to continue the use of online systems with clients during projects and to extend this practice with other contacts in the task environment, as it enhances trust and consequently prompt and uncomplicated exchanges throughout the process. Finally, the exploration of the potential use of collaborative practice with consumers throughout the process was recommended in the collection of ideas and feedback. This was found to enable prompt amendments during projects and increase internal participation in the innovation process.

# 6.2 Limitations of the research and future research

The study sought to qualitatively investigate the innovation process in light of social, knowledge and structural capital in small digital marketing agencies. This aim was based on the overall philosophical stance of the researcher, which subjectively addressed the research question subjectively. Whilst the qualitative nature of the research allowed for the application of validity and reliability criteria, it did not allow for the application of the principle of generalisability. This means that the replication of the research to contribute further to the understanding of the innovation process, and social, knowledge and structural capital and to further triangulate findings. For instance, a quantitative approach could be adopted to investigate the findings across a broader range of organisations in the digital and in the service industries.

This cross-sectional qualitative research conducted an in-depth exploration of the innovation process, as well as social, knowledge and structural capital and their implications. The potential bias of collecting data from a respondent at a particular time, which is part of the characteristic of the approach, was prevented with the use of multiple cases and multiple interviewees. However, the approach did not allow for an exploration of the elements and their implications for the innovation process over a longer period of time. The literature stressed the value of a longer-term approach in

the investigation of innovation in providing an enhanced explanation for its influence on organisations (Damanpour et al., 2009). This provides opportunities for future research to adopt a longitudinal approach to investigate the longer-term implications for social, knowledge and structural capital on the innovation process, taking into account the constantly evolving nature of relationships and technology. Additionally, future studies could explore the implications of social, knowledge and structural capital for the innovation process in relation to organisational performance over a longer period of time.

# 6.3 Contribution of the research

This research built on several lines of study, namely innovation, social capital, knowledge and structural capital. In addition to contributing to each line theories were highlighted, which allowed for theoretical triangulation. This meant that social, knowledge and structural capital informed the innovation process and therefore data could be interpreted from these different perspectives. This approach helped to illustrate a more detailed picture of the complex issue of innovation in the particular context of small digital marketing agencies that, in turn, helped to contribute to the overall theory of innovation process. Furthermore, it provided a theoretical link between the innovation process, and social, knowledge and structural capitals, which was highlighted as a gap in the literature. The study also contribute to the discussion on intellectual capital with the first application of a theoretical framework of intangible assets that encompasses knowledge as capital, in addition to social and structural capital.

The findings and consequent learning gained on the service innovation process from the empirical study of small service organisations, which are reliant on technology, provided new insights aimed at the theoretical development of an integrative approach to service innovation that is relevant for both products and services. The findings are that small digital marketing agencies use a sequential innovation process, traditional of product and standardised service innovations. However, the participatory and flexible characteristics of the process mean that it remains open and adaptable to the unexpected challenges and demands of service innovation in small service organisations. Moreover, the findings highlight the complementarity of tacit and explicit knowledge with regard to the innovation process in services, due to their influence on the process. Furthermore, intangible and tangible forms of structural capital are found to have some implications on the innovation process in small service organisations. The application of a multidimensional framework of social capital provided a representation of social relationships as a dynamic system where the structure and the quality of relationships were acknowledged.

From a methodological perspective, the consideration of expert interviews as a research methodology, and not only as a traditional data collection technique provided some new empirical insights on the discussion of methodological triangulation in qualitative studies. Furthermore, the study highlighted that the number of case studies was adapted to the particular context of small digital marketing agencies and the broad nature of their activities, which was reflected in their industry classifications. This adds to the argument that choices in the number of cases are reliant on the particular industry and type of organisations involved. Finally, some practical contributions were made, firstly to the improvement of the innovation process in small digital marketing agencies through the recommendations of the study, and secondly to the development and implementation of policies aimed at stimulating service innovation by highlighting the relevance of inter-organisational relationships, knowledge and systems and practices to the innovation process.

# Appendix A – Interview Guidelines (Case studies)

# Nature of the innovation process and characteristics of social, knowledge and structural capital – Implications of social, knowledge and structural capital on the innovation process

Case study:
Interview number:
Name of the organisation:
Name of the participant:
Position in the organisation:
rosition in the organisation.
Data and time:
Date and time:
Location:

## Stage 1 – Context

- Can you briefly tell me about your organisation?
- How would you describe the context in which your organisation operates?
- From your perspective has there been any changes in your industry in the past 6 months to a year? What changes and why?
- And changes in your organisation? Why?

## Stage 2 - Innovation and innovation process

- Could you tell me about innovation in your organisation? What innovation do you undertake?
- What is innovation for your organisation?
- Can you give me an example of innovation:
  - What did you do?
  - How did you do it? How did it start
  - Why did you do it?
  - What technology did you use?
- What special mechanisms to you have in your organisation to innovate? How do they work?

- Do you have any mechanisms or practices that encourage the introduction of innovative ideas?
- What are the basic criteria, if any, to select new ideas?
- What does your organisation rely on to innovate?
- What is the effect of innovation? In the context of your organisation.

## Stage 2 - Social capital - Inter-organisational relationships

Other organisations that you relate to externally that are able to affect your activities and business decisions

(Closeness and frequency of interaction)

- Who does your organisation usually interact with in relation to your business activities?
- Why with them particularly?
- How would you describe your relationship with them?
- How close do you consider these relationships to be: Close or distant? Why?
- How often do you interact?

Trust (confidence in the others and behaviours)

- Do you see trust in these relationships? How do you see trust reflected?
- What sort of information do you tend to share?
- Is it openly shared?
- Do you consider this information to be confidential? Why?
- How do you see these external relationships contributing to your organisation?
- How do you see these external relationships contributing to your innovation? What do these relationships bring to your innovation?

## Stage 3 – Knowledge capital

- What does knowledge mean to your organisation?
- How important is knowledge to your organisation? Why?
- What sort of knowledge does your organisation need to operate? Why?
- How does your organisation acquire new knowledge/skills?
- How do you see knowledge/skills contributing to your organisation? Why?
- How do you see knowledge/ skills contributing to your innovation? Why?

## Stage 4 - Structural capital

Systems and practices used internally to capture and store knowledge and to develop good communication with the task environment

- How is knowledge captured in your organisation?
- What knowledge do you mostly capture? Why?
- What systems and processes do you use to develop good relationships with external organisations?
- How relevant do you see these systems to your organisation? Why? What do they bring?
- And how relevant do you see them to your innovation?

•

# Is there anything else important you think needs to be added?
## Appendix B – Interview Guidelines (Expert Interviews)

# Use of social, knowledge and structural capital to enhance the service innovation process

Interview number:
Name of the participant:
Expertise:
Date and time:

#### Stage 1 – Innovation in small digital marketing agencies

- What are the most relevant issues with regard to innovation in the digital marketing industry? Why?
- How do you see digital marketing innovation developing in the near future? Why?
- What do you see are the characteristics of an effective innovation process in small digital marketing agencies?
- What do you see as the strengths of small digital marketing agencies with regard to innovation?
- What are their weaknesses? What do they need more of?
- Are there any model/strategy you might be aware of that are applied in digital marketing agencies to enhance innovation?

#### Stage 2 – Social capital - Inter-organisational relationships

- What are the external relationships that contribute to innovation in digital marketing agencies? Why? How?
- What other relationships might be of further contribution?
- How could they contribute?
- What would this require?

#### Stage 3 – Knowledge Capital

- What type of knowledge is relevant to innovation to small digital marketing agencies? Why?
- What type of knowledge do they tend to lack with regard to innovation?

- Where could they source such knowledge?What knowledge do their inter-organisational relationships mentioned earlier provide that is needed to innovate?
- How does knowledge contribute to their innovation?

#### **Stage 3 – Structural Capital**

- What are the organisational systems and practices you see most relevant to innovation in small digital marketing agencies? Why?
- What systems and practices are small digital marketing agencies lacking to better innovate? Why?
- What would a good use of systems and processes look like when innovating?

#### Is there anything else important you think needs to be added?

# Appendix C – Letter of invitation to participants (Case studies)

Title of project: An exploration of the innovation process in small digital marketing agencies

in the UK: Understanding the social, knowledge and structural capital implications.

Dear .....,

I am currently doing a PhD at the University of Salford, Manchester – Business School – Department of Management. My focus is on small digital marketing agencies (1 to 49 employees) and their innovation process. My research explores the implications of social, knowledge and structural capital on the service innovation process.

I am interested in researching digital agencies because of their particular role in marketing, and their track record in the innovation of services. As a digital award (finalist/winner) agency you would be able to provide valuable insight pertinent to the research, and therefore, I was wondering if you would be interested in sharing your experiences, opinions, observations and thoughts around the above topics.

Your involvement would bring a considerable contribution to both theory and practice within the fields of service innovation. Gaining a better understanding would also contribute to the development of recommendations aimed at enhancing the innovation process of small digital marketing agencies.

Your participation would involve one or several staff members being interviewed for about an hour each. I can guarantee that names and responses would not appear in any part of the report and be used only for the purpose of the study. A summary of the findings would also be available to you once the research process has been completed.

I would be extremely grateful if you could support my research effort and thank you in advance if you decide to take part to the process.

Please do contact me to confirm if you would like to take part, alternatively if you have any question or doubts about the research please do not hesitate to contact me at (email address)

Yours sincerely,

XYZ PhD student in Business Management Salford Business School University of Salford, Manchester Lady Hale Building Salford M5 4WT Tel: ..... Mobile: .....

## Appendix D – Participants Information Sheet (Case studies)

## An exploration of the innovation process in small digital marketing agencies in the UK: Understanding the social, knowledge and structural capital implications.

Thank you for agreeing to take part in this research. The following notes will help you to understand the purpose of the research and your participation. Please do contact me if you have any questions or would like more information about the study.

#### Purpose of the study

The purpose of the study is to explore the innovation process in small digital marketing agencies in the UK, and to understand the implications of social, knowledge and structural capital on the innovation process. Findings will contribute to the development of recommendations to enhance the innovation process in small agencies.

#### Why you have been chosen

As an experienced and successful digital marketing agency you will be able to offer good insight on the innovation of services and innovation process, comment on your business relationships, organisational knowledge, systems and practices and their implications on your innovation process.

#### What will your participation involve

The research aims to interview one (Founder/CEO) or several members of staff. (Senior and mid level management) The interview process will involve a face-to-face or phone interview with the use of a semi-structured questionnaire, which will take approximately 1 hour. The purpose is to allow you to express in depth your experience and behaviour with regard to your business activities. The face-to-face interview can be carried out at your work premises or any other places of your convenience. The interview will be recorded and then word-processed to be analysed as text data. The recording will be deleted once it has been processed. A copy of the main research findings will be available at the end of the research process.

Some of your comments might be used in the final report, however these will be anonymous. Your name will not appear in any part of the report, therefore it will not be possible to identify you.

You are entitled to withdraw from the process at anytime without the need to give a reason. If you decide to withdraw during or after the interview, all data will be deleted and not included in the data analysis. You are also entitled not to answer some questions during the interview if you do not wish to. You will be asked to sign a consent form on the day of the interview.

If you have any further questions or concerns about the research you can contact the University of Salford.

#### Supervisor's name:X

Department: Salford Business School (Enterprise and Innovation)Email:XPhone: X

## Appendix E – Letter of invitation to participants (Experts)

**Title of project:** An exploration of the innovation process in small digital marketing agencies in the UK: Understanding the social, knowledge and structural capital implications.

Dear.....,

I am currently doing a PhD at the University of Salford, Manchester – Business School – Department of Management. My focus is on small digital marketing agencies and their innovation process. I am particularly interested in small marketing digital agencies due to the relevance of marketing and digital across industries. My research explores the implications of social, knowledge, and structural capital on the service innovation process.

Having read extensively on the subject of service innovation and the digital field I have identified you as having considerable expertise that would be pertinent to the research and therefore was wondering if you would be interested in sharing your experiences, opinions, observations and thoughts around these topics. The main focus of the interview would be to ascertain *how* agencies can best use their social, knowledge capital to enhance their innovation process.

Your involvement would bring a considerable input contributing to both theory and practice within the field of service innovation. Gaining a better understanding would also contribute to the development of recommendations aimed at enhancing the innovation process of small digital marketing agencies.

I can guarantee that your name would not appear in any part of the report and be used only for the purpose of the study. A summary of the findings would also be available to you once the research process has been completed.

I would be very grateful if you could support my research effort and thank you in advance if you decide to take part to the process.

If you have any question or doubt about the research please do not hesitate to contact me at (email address).

Yours sincerely,

YXZ PhD student in Business Management Salford Business School University of Salford, Manchester Lady Hale Building Salford M5 4WT Tel: .... Mobile: .....

## **Appendix F – Participants Information Sheet (Experts)**

#### An exploration of the innovation process in small digital marketing agencies in the UK: Understanding the social, knowledge and structural capital implications.

Thank you for agreeing to take part in this research. The following notes will help you to understand the purpose of the research and your participation. Please do contact me if you have any questions or would like more information about the study.

#### Purpose of the study

The purpose of the study is to explore the innovation process in small digital marketing agencies in the UK, and to understand the implications of social, knowledge and structural capital on the innovation process. Findings will contribute to the development of recommendations to enhance the innovation process in small agencies.

#### Why you have been chosen

You are being invited to take part in the study due to your expertise, which it is believed will provide valuable insight to help evaluate how small digital marketing agencies can use social, knowledge and structural capital to strengthen their innovation process.

#### What will your participation involve

The interview process will involve a face-to-face or phone interview with the use of a semistructured questionnaire, which will take approximately 1 hour. The face-to-face interview can be carried out at your work premises or any other places of your convenience or by Skype/phone. The interview will be recorded and then word-processed in order to be analysed as text data. The recording will be deleted once it has been processed. A copy of the main research findings will be available if you wish.

Some of your comments might be used in the final report, however these will be anonymous. Your name will not appear in any part of the report therefore it should not be possible to identify you.

You are entitled to withdraw from the process at anytime without the need to give a reason. If you decide to withdraw during or after the interview, all data will be deleted and not included in the data analysis. You are also entitled not to answer some questions during the interview if you do not wish to.

If you have any further questions or concerns about the research you can contact the University of Salford.

Supervisor's name: X
Department: Salford Business School (Enterprise and Innovation)
Email: X
Phone: X

## Appendix G – Documents reviewed (Case studies)

Case	Ref	Source	Year	Title
	1a	Company website	2017 2018	Company website. Company overview, news and services
	2a	Companies House	2017 2018	Company overview
	3а	Facebook	2017 2018	Company Facebook Page
	4a	Twitter	2017 2018	Company Twitter Page
	5a	City X Chamber of Commerce	201X	Interview of marketers and storytellers for the launch of a new weekly podcast series
	6a	X Echo (Local newspaper)	201X	Agency chief writes about how-to guide on running a successful business
	7a	Regional online News (Marketing, Media, innovation)	201X	Interview of the CEO
	8a	Regional online News (Marketing, Media, innovation)	201X	Government campaign to promote apprenticeships
	8a	Regional online News (Marketing, Media, innovation)	201X	X unveils rebrand and new website
Case B	Ref	Source	Year	Title
	1b	Company website	2017 2018	Company website Company overview, news and services
	2b	Companies House	2017 2018	Company overview
	3b	Facebook	2017 2018	Company Facebook Page News
	4b	Twitter	2017 2018	Company Twitter Page. News
	5b	Regional online News (Marketing, Media, innovation)	201X	Agency X adds to team after client wins. Recruitment of new staff
	6b	Regional online News (Marketing, Media, innovation)	201X	Company XX recruits Agency X as it extends debut TV campaign
	7b	Regional online News (Marketing, Media, innovation)	201X	Listing of top 50 integrated agencies in the north of England

Case C	Ref	Source	Year	Title
	1c	Company website	2017 2018	Company website. Company overview, news and services, blog
	2c	Companies House	2017 2018	Company overview
	3c	Facebook	2017 2018	Company Facebook Page. News
	4c	Twitter	2017 2018	Company Twitter Page. News
	5c	Industry Award	201X	Company overview
	6c	PDF Document	2017	Web Development Process. (Provided by the participant)
Case D	Ref	Source	Year	Title
	1d	Company website	2017 2018	Company Website. Company overview, news and services
	2d	Companies House	2017 2018	Company overview and accounts
	3d	Facebook	2017 2018	Company Facebook Page. News
	4d	Twitter	2017 2018	Company Twitter Page. News
	5d	Regional online business news	201X	Agency X top Digital Agency in region X
	6d	International online business magazine	201X	Agency X launches new product ranges for brand X
Case E	Ref	Source	Year	Title
	1e	Company website	2017 2018	Company Website. Company overview, news and services
	2e	Companies House	2017	Company overview and accounts
	3e	Facebook	2017 2018	Company Facebook Page. News
	4e	Twitter	2017 2018	Company Twitter Page. News
	5e	Synergist	201X	Presentation of the agency. Info graphic
	6e	British Interactive Media Association (BIMA)	201X	Organisation profile
	7e	Regional online news	2016	Company Information - Promotion
	8e	Regional online News (Marketing, Media, innovation)	201X	Agency X helps company X on health research project
	9e	Consultancy practice	201X	Grants and Tender Specialists. Business advice to Agency X on their tendering processes

Case F	Ref	Source	Year	Title
	1f	Company website	2017 2018	Company Website. Company overview, news and services
	2f	Companies House	201X	Company overview and accounts
	3f	Companies House	201X	Annual Return. Company accounts
	4f	Companies House	201X	Abbreviated Accounts
	5f	Facebook	2017 2018	Company Facebook Page. News
	6f	Twitter	2017 2018	Company Twitter Page. News
	7f	Trade association	201X	Digital and technology community.
	8f	Slideshare	201X	Presentation. Use of Google Analytics
Case G	Ref	Source	Year	Title
	1g	Company Website	2017 2018	Company website. Company overview, news and services
	2g	Companies House	2017	Company overview and accounts
	3g	Facebook	2017 2018	Company Facebook Page. News
	4g	Twitter	2017 2018	Company Twitter Page. News
	5g	Regional online News (Marketing, Media, innovation)	201X	Agency doubles its turnover to £Xm
	6g	Online recruitment agency	201X	Advert for Junior Web developer. Graduate scheme
	7g	Regional digital award	201X	Interview with agency G.
	8g	Recommended Agency Register	201X	Profile and details of services of agency G.
Case H	Ref	Source	Year	Title
	1h	Company website	2017 2018	Company Information. Company overview, news and services
	2h	Companies House	2017 2018	Company overview
	3h	Companies House	2017	Accounts
	4h	Companies House	2017	Annual Return
	5h	Facebook	2017 2018	Company Facebook Page. News
	6h	Twitter	2017	Company Twitter Page. News

			2018	
	7h	Regional evening news	201X	Service developed for a client – Agency X creates Education app
	8h	Online magazine	201X	Agency opens a branch office in another European country
	9h	Online magazine	201X	Service developed for a client - Application
Case	Ref	Source	Year	Title
	1i	Company website	2017 2018	Company Information. Company overview, news and services
	2i	Companies House	2017	Company overview
	3i	Facebook	2017 2018	Company Facebook Page. News
	4i	Twitter	2017 2018	Company Twitter Page. News
	5i	Trade association	201X	Company Profile
	6i	Online magazine	201X	Service developed for a client - Branding
	7i	Online magazine	201X	Service developed for a client - Social Media
	8i	Agency X's website	201X	Agency merger between agency X and agency I
	9i	Regional online News (Marketing, Media, innovation)	201X	Agency moves to City X
Case J	Ref	Source	Year	Title
	1j	Company website	2017 2018	Company Information. Company overview, news and services
	2ј	Facebook	2017 2018	Company Facebook Page. News
	Зј	Twitter	2017 2018	Company Twitter Page. News
	4j	PDF Document	2017	Process of service development. (Provided by the participant)
Case K	Ref	Source	Year	Title
	1k	Company website	2017 2018	Company Information. Company overview, news and services
	2k	Companies House	2017	Company overview

	3k	Facebook	2017	Company Facebook Page. News
	-		2018	
	4k	Twitter	2017 2018	Company Twitter Page
	5k	Directory	2017	Directory of agencies
	6k	Online magazine	201X	Appointment of the first Strategy Director
Case L	Ref	Source	Year	Title
	11	Company website	2017 2018	Company Information. Company overview, news and services.
	21	Companies House	2017	Company overview
	31	Facebook	2017 2018	Company Facebook Page. News
	41	Twitter	2017 2018	Company Twitter Page. News
	51	Video animation	2015	Sample of animation. (Provided by the participant)
-	61	PDF	2016	Organisational guidelines on deadline. (Provided by the participant)
	71	PDF	2016	Organisational service animation process. (Provided by the participant)
	81	360 degrees Christmas Card	2016	Sample of animation. (Provided by the participant)
	91	360 degrees Christmas Card	2016	Sample of animation (Provided by the participant)
	101	Film festival awards	201X	Award Nomination at the X Award
Case M	Ref	Source	Year	Title
	1m	Company website	2017 2018	Company Information. Company overview, news and services
	2m	Companies House	2017 2018	Company overview
	3m	YouTube	201X	Promotional video
	4m	Facebook	2017 2018	Company Facebook Page. News
	5m	Twitter	2017 2018	Company Twitter Page. News
	6m	Case study	2017	Explanation of a client project. (Provided by the participant)
	7m	Online regional news	201X	Interview of the CEO on digital business in city X

## Appendix H – Key themes from 'within-case' analysis

Key themes identified in the within-case analysis on the nature of the innovation process, the characteristics of social, knowledge and structural capital, and the implications of the latters for the innovation process

Nature of the innovation process	Characteristics of social capital
<ul> <li>A thorough procedure</li> <li>Linear and rigid</li> <li>A management process</li> <li>A service development process</li> <li>Tailored to clients and client focused</li> <li>Open and collaborative</li> <li>Participatory</li> <li>Iterative</li> <li>Flexible</li> </ul>	<ul> <li>Weak ties and trust:</li> <li>Competition</li> <li>When needed (interaction)</li> <li>Mutual benefits</li> <li>Contractual</li> <li>Complementary</li> <li>Resources generation (ideas, skills, promotion, reputation)</li> <li>Behaviour</li> <li>Recommendations</li> <li>Individual connections</li> </ul>
	<ul> <li>Strong ties and trust: <ul> <li>Intended</li> <li>Commercial benefits</li> <li>Preferred networks and past experiences</li> <li>Compatibility</li> <li>Ethos</li> <li>Communication</li> <li>Access to data</li> <li>Mutual understanding</li> <li>Circumstantial</li> <li>Intended</li> <li>Impartial (advice)</li> <li>Expertise</li> <li>Personal connections</li> <li>Implicit</li> <li>Support</li> <li>Dependency</li> </ul></li></ul>
Characteristics of knowledge capital	Characteristics of structural capital
<ul> <li>Creative</li> <li>Technical/digital</li> <li>Industrial</li> <li>Business and marketing</li> <li>Understanding of consumers/technology implications</li> <li>Up to date</li> <li>Collective</li> <li>Professional development</li> <li>Educational</li> <li>Know how</li> <li>Experiences</li> </ul>	<ul> <li>Formal and informal (practices)</li> <li>Internet based</li> <li>Software</li> <li>Physical (employees/senior management)</li> <li>Hard copy</li> <li>Standardised (accreditation)</li> <li>Processed (project management)</li> <li>Internally focused</li> <li>Interaction approach</li> <li>Organic</li> </ul>

	<ul> <li>Sharing base</li> <li>Client facing</li> <li>Informal/formal</li> <li>Organic</li> <li>Management responsibility</li> </ul>
Implications for the innovation process	
<ul> <li>Efficiency of the process is enhanced</li> <li>Increased reliance on internal resources</li> <li>Reliance on providers</li> <li>Provision of an overall focus</li> <li>Consistency of the process is enhanced</li> <li>A Two-way interaction is generated</li> <li>Specified resources within the process are required</li> <li>Leads to clients tailored activities</li> <li>Sequential characteristics of the process are enhanced</li> <li>Technical and creative potential of the process is enhanced</li> <li>Interaction in the process is enhanced</li> <li>Strategic guidance in the process is enhanced</li> </ul>	

### References

Adler, P. S. and Kwon, S. W. (2002) Social Capital: Prospects for a New Concept. **Academy of Management Review**, 27 (1), pp. 17-40.

Agrawal, V. C. (2014) Case Study – Analysis. **Global Business Review**, 15 (1), pp. 179-182.

Ahuja, G. (2000) Collaboration networks, structural holes, and innovation: A longitudinal study. **Administrative Science Quarterly**, 45, pp. 425-455.

Aiken, M. and Hage, J. (1971) The Organic Organization and Innovation, **Sociology**, 5, pp.63-82.

Akhavan, P. and Hosseini, S. M. (2016) Social capital, knowledge sharing, and innovation capability: an empirical study of R&D teams in Iran. **Technology Analysis and Strategic Management**, 28 (1), pp. 96-113.

Al Mamun, A., Muniady, R., Permarupa, P. Y., Binti Zainol, N. R., Che Nawi, N. B. and Malarvizhi, C. A. (2016) Social Capital and Entrepreneurial Competencies: A Study Among Women Micro Entrepreneurs in Malaysia. **The Journal of Developing Areas**, 50 (5), pp. 363 – 370.

Alam, I. and Perry, C. (2002) A customer-oriented new service development process. **Journal of Services Marketing**, 16 (6), pp. 515-534.

Anderson, S. D., Patil, S. S. and Sullivan, G. (2001) Optimizing Owner/Contractor Core Competencies for Capital Programs. **Journal of Management in Engineering**, 17 (2), pp. 77 – 85.

Argote, L., McEvily, B. and Reagans, R. (2003) Managing Knowledge in Organizations: An Integrative Framework and Review of Emerging Themes. **Management Science**, 49 (4), pp. 571-582.

Ashnai, B., Henneberg, S. C., Naudé, P. and Francescucci. A. (2016) Inter-personal and inter-organizational trust in business relationships: An attitude-behavior-outcome model. **Industrial Marketing Management**, 52, pp. 128-139.

Avionitis, G. J., Papastathopoulou, P. G. and Gounaris, S. P. (2001) An empiricallybased typology of product innovativeness for new financial services: success and failure scenarios. **Journal of Product Innovation Management**, 18 (5), pp. 324-42.

Autry, C. W. and Griffis, S. E. (2008) Supply chain capital: The impact of structural and relational linkages on firm execution and innovation. **Journal of Business Logistics**, 29, pp. 157-173.

Babbie, E. (2007) **The Practice of Social Research**. 11<sup>th</sup> ed. Belmont: Thomson Wadsworth.

Baker, G.R. (2011) The contribution of case study research to knowledge of how to improve quality of care. **BMJ Quality Safety** 1, pp. 130-135.

Bansal, P. and Corley, K. (2011) The coming of age for qualitative research: Embracing the diversity of qualitative methods. Academy of Management Review, 54 (2), pp. 233-237. In Saunders, M., Lewis, P. and Thornhill, A. (2015) **Research methods for business students**. 7<sup>th</sup> ed. New York: Pearson Education.

Barcet, A. (2010) Innovation in services: a new paradigm and innovation model. In Gallouj, F. and Djellal, F. (eds.) (2010) **The Handbook of Innovation and Services: A Multi-disciplinary Perspective.** Cheltenham, Elgar Publishing Ltd, pp. 27-48.

Barney, J. B. (1991) Firm resources and sustained competitive advantage. **Journal** of Management, 17 (1), pp. 99 – 120.

Barras, R. (1986) Towards a theory of innovation in services. **Research Policy**, 15, pp. 161-173.

Basadur, M. and Gelade, G. A. (2006) The Role of Knowledge Management in the Innovation Process. **Creativity and Innovation Management**, 15 (1), pp. 45-62.

Bendickson, J. S. and Chandler, T. D. (2017) Operational performance: The mediator between human capital developmental programs and financial performance. **Journal of Business Research**, pp. 1 - 10 (article in press).

Bensimon, E. M., Polkinghorne, D. E.; Bauman, G. L. and Vallejo, E. (2004) Doing Research that Makes a Difference. **The Journal of Higher Education**, 75 (1), pp. 104-126.

Bergenhdahl, M. and Magnusson, M. (2015) Creating Ideas for Innovation: Effects of Organizational Distance on Knowledge Creation Processes. **Creativity and Innovation Management**, 24 (1), pp. 87-101.

Besser, T. L. and Miller, N. (2011) The structural, social, and strategic factors associated with successful business networks. **Entrepreneurship & Regional Development**, 23 (3-4), pp. 113-133.

Bettencourt, L. A. (2010). Service innovation: How to go from customer needs to breakthrough services. New York: McGraw- Hill.

Blaikie, N. (2010) **Designing Social Research**. 2<sup>nd</sup> ed. Cambridge: Polity.

Bogner, A., Littig, B. and Menz, W. (2009) **Interviewing Experts**. Basingstoke: Palgrave Macmillan.

Bolino, M. C., Turnley, W. H. and Bloodgood, J. M. (2002) Citizenship Behavior and the Creation of Social Capital in Orgnizations. **Academy of Management and Review**, 27 (4), pp. 505-522.

Boone, T. (2000) Exploring the link between product and process innovation in services. In Fitzsimmons, J. and Fitzsimmons, M. (eds.) New Service development: creating memorable experiences. Thousand Oaks, CA: Sage, pp. 92-107.

Booz, Allen and Hamilton (1982) New Product Management for the 1980's. New York: Booz, Allen and Hamilton, 1982.

Bornay-Barrachina, M., López-Cabrales, A. and Valle-Cabrera, R. (2016) How do employment relationships enhance firm innovation? The role of human and social capital. The International Journal of Human Resource Management, pp. 1-30.

Borgatti, S. P. and Foster, P. C. (2003) The Network Paradigm in Organizational Research: A Review and Topology. Journal of Management, 29 (6), pp. 991-1013.

Bosch-Sijtsema, P. M. and Henriksson, L. H. (2014) Managing projects with distributed and embedded knowledge through interactions. International Journal of **Project Management**, 32, pp. 1432-1444.

Bourdieu, P. (1986) The forms of capital. In Richardson, J.G. (ed.) Handbook of Theory and Research for the Sociology of Education. New York: Greenwood, pp. 241-258.

Bowers, M. R. (1989) Developing New Services: Improving the Process Makes it Better. Journal of Services Marketing, 3 (1), pp. 15-20.

Bowles, S. and Gintis, H. (2002) Social capital and community governance. Economic Journal, 112 (483), pp. 419-436.

Braun, V. and Clarke, V. (2013) Successful Qualitative Research: a practical guide for beginners. London: Sage Publications Ltd.

Britten, N., Jones, R., Murphy, E. and Stacy, R. (1995) Qualitative research methods in general practice and primary care. Family Practice, 12 (1), pp. 104-114.

Brouwer, E. (1997) Into innovation: determinants and indicators, PhD thesis, Drukkerij Elinkwijk by, University of Amsterdam, Utrecht. In De Jong, J. P. J. and Vermeulen, P. A. M. (2003) Organizing successful new service development: a literature review. Management Decision, 41 (9), pp. 844-858.

Brown, J. S. and Duguid, P. (1998) Invention, innovation & organization. Organization Science, pp.1-36.

Brunie, A. (2009) Meaningful distinctions within a concept: Relational, collective and generalized social capital. Social Science Research, 38, pp. 251-265.

Bryan, D., Rafferty, M. and Wigan, D. (2017) Capital unchained: finance, intangible assets and the double life of capital in the offshore world. Review of International Political Economy, 24 (1), pp. 56-86.

Bryman, A. and Bell. E. (2011) Business Research Methods. 3<sup>rd</sup> ed. Oxford: Oxford 376

University Press.

Bryson, J. M., Ackermann, F. and Eden, C. (2007) Putting the Resource-Based View of Strategy and Distinctive Competencies to Work in Public Organizations. **Public Administration Review**: 67 (4), pp. 702 – 717.

Buenechea-Elberdin, M. (2017) Structured literature review about intellectual capital and innovation. **Journal of Intellectual Capital**, 18 (2), pp. 262-285.

Busse, G. (2003) Leitfadengestützte, qualitative Telefoninterviews. In Katenkamp, O., Kopp, R. and Schröder, A. (eds), **Praxishandbuch Empirische Sozialforschung** (Münster u.a.: LIT), pp. 27-33.

Burt, R. (1992) Structural Holes. Cambridge, MA: Harvard University Press.

Burt, R. (1997) The contingent value of social capital. **Administrative Science Quarterly**, 42 (2), pp. 339-365.

Burt, R. (2000) The network structure of social capital. **Research in organizational behavior**, 22, pp. 345-423.

Camacho, J. A. and Rodríguez (2005) How Innovative are Services? An Empirical Analysis for Spain. **The Service Industries Journal**, 25 (2), pp. 253-271.

Campagnolo, D. and Cabigiosu, A. (2010) Innovation, Service Types and Performance in Knowledge Intensive Business Services. In Agarwal, R., Selen, W., Roos, G. and Green, R. (eds.) (2015) **The Handbook of Service Innovation**. London: Springer, pp. 5-25.

Campbell, J. M. and Park, J. (2017) Extending the resource-based view: Effects of strategic orientation toward community on small business performance. **Journal of Retailing and Consumer**, 34, pp. 302 – 308.

Camps, S. and Marques, P. (2014) Exploring how social capital facilitates innovation: The role of innovation enablers. **Technological Forecasting and Social Change**, 88, pp. 325-348.

Capaldo, A. (2007), Network Structure and Innovation: The Leveraging of a Dual Network as a Distinctive Relational Capability. **Strategic Management Journal**, 28, pp. 585-608.

Capra, F. (2003) The Hidden Connections. London: Flamingo.

Carey, S., Lawson, B. and Krause, D. R. (2011) Social capital configuration, legal bonds and performance in buyer–supplier relationships. **Journal of Operations Management,** 29, pp. 277-288.

Carlan, V., Sys, C., Vanelslander, T. and Roumboutsos, A. (2017) Digital innovation in the port sector: Barriers and facilitators. **Competition and Regulation in Network Industries**, 18 (1-2), pp. 71-93.

Carmona-Lavado, A., Cuevas-Rodríguez, G. and Cabello-Medina, C. (2010) Social and organizational capital: Building the context for innovation. **Industrial Marketing Management**, 39, pp. 681-690.

Carpenter, M. A., Geletkanycz, M. A. and Sanders, G. W. (2004) Upper Echelons Research Revisited: Antecedents, Elements, and Consequences of Top Management Team Composition. **Journal of Management**, 30 (6), pp. 749-778.

Carpiano, R. M. and Fitterer, L. M. (2014) Questions of trust in health research on social capital: What aspects of personal network social capital do they measure. **Social Science and Medicine**, 116, pp. 225-234.

Carson, D., Gilmore, A. and Rocks, S. (2004) SME marketing networking: a strategic approach. **Strategic Change**, 13, pp. 369-382.

Castells, M. (2010) **The Rise of network society, The Information Age: Economy, Society and Culture** Vol.1. Oxford: Wiley-Blackwell.

Castro, I. and Roldán, J. L. (2013) A mediation model between dimensions of social capital. **International Business Review**, 22, pp. 1034-1050.

Cavusgil, S. T., Calantone, R. J. and Zhao, Y. (23003) Tacit knowledge transfer and firm innovation capability. **Journal of Business and Industrial Marketing**, 18 (1), pp. 6-21.

Chahal, H. and Bakshi, P. (2015) Examining intellectual capital and competitive advantage relationship: Role of innovation and organizational learning. **International Journal of Bank Marketing**, 33 (3), pp. 376-399.

Chae, B. (2012) An evolutionary framework for service innovation: Insights of complexity theory for service science. **International Journal of Production Economics**, 135, pp. 813-822.

Chaffey, D., Ellis-Chadwick, F., Johnston, K. and Mayer, R. (2006) **Internet Marketing: Strategy, Implementation and Practice**. 3<sup>rd</sup> ed. Harlow, UK: Pearson Education Limited.

Chaffey, D. and Allen, R. (2016) Managing Digital Marketing in 2016: Best practices for integrating digital technology, marketing and media to fuel business growth. Smart Insights (Marketing Intelligence) Limited. [Online]. Available from: <a href="https://www.smartinsights.com">https://www.smartinsights.com</a>> [Accessed 15 March 2015].

Chen, Y. H., Lin, T. P. and Yen, D. C. (2014) How to facilitate inter-organizational knowledge sharing: The impact of trust. **Information and Management**, 51 (5), pp. 568-578.

Chen, K. H., Wang, C. H., Huang, S. Z. and Chen, G.C. (2017) Service innovation and new product performance: The influence of market-linking capabilities and market turbulence. **International Journal of Production Economics**, 172, pp. 54-64.

Cheng, J. L. C. (1984) Paradigm development and communication in scientific settings: A contingency analysis. Academy of Management Journal, 27, pp. 870-877. In Phelps, C., Heidl, R. and Wadhwa, A. (2012) Knowledge, Networks, and Knowledge Networks: A Review and Research Agenda. **Journal of Management**, 38 (4), pp. 1115-1166.

Cheng, W., Hailin, L. and Hongming, X. (2008) Technology Innovation and Core Competencies: A Empirical study Based Learning and Social Capital's Perspective. **2008 International Conference on Information Management, Innovation Management and Industrial Engineering**, 1, pp. 386 – 389.

Chesbrough, H. (2012) Open Innovation, Where We've Been and Where We're Going. **Research Technology Management**, July-August, Special Issue: Open Innovation Revisited.

Chisholm, A. M. and Nielsen, K. (2009) Social Capital and the Resource-Based View of the Firm. **International Studies of Management and Organization**, 39 (2), pp. 7 – 32.

Churchill, N. C. and Lewis, V. L. (1986) Entrepreneurship research: directions and methods. In Sexton, D. L. and Smilor, R. L. (eds.) The Art and Science of Entrepreneurship, Cambridge, MA: Ballinger, pp. 333-65. In Shaw, E. (1999) **A guide to the qualitative research process: evidence from a small firm study**. Qualitative Market Research: An International Journal, 2 (2), pp. 59-70.

CIM (2018) Chartered Institute of Marketing [Online]. Available from: <<u>https://www.cim.co.uk</u>> [Accessed 1 March 2018].

Clark, P. (2003) Organizational innovations. London: Sage Publication.

Cleary, P. (2009) Exploring the relationship between management accounting and structural capital in a knowledge intensive sector. **Journal of Intellectual Capital**, 10 (1), pp.37-52.

Coff, R. W. (2002) Human capital, shared expertise, and the likelihood of impasse on corporate acquisitions. **Journal of Management**, 28, pp.107-128.

Coleman, J. S. (1988) Social Capital in the Creation of Human Capital. **American Journal of Sociology**, 94, pp. 95-120.

Comet, C. (2009) Social capital and profits of small firms in the French construction industry. **Construction Management and Economics**, 27, pp. 411-418.

Cook, S. D. N. and Brown, J. S. (1999) Bridging epistemologies: Between organizational knowledge and organizational knowing. **Organization Science**, 10 (4), pp. 381-400.

Coombs, R. and Miles, I. (2000) Innovation, Measurement and Services: **The New** Problematique, pp. 85-103. In Metcalfe, J. S. and I. Miles (eds.) (2000) **Innovation Systems in the Service Economy. Measurement and Case Study Analysis,** Boston: Kluwer.

Creswell, J. W. (2003) **Research design: Qualitative, quantitative, and mixed methods approaches**. (2nd ed.) Thousand Oaks, CA: Sage.

Cresswell, J. W. (2007) **Qualitative inquiry and research design**, 2nd ed. Thousand Oaks, CA: Sage Publications.

Cresswell, J. W. and Poth, C. N. (2017) **Qualitative Inquiry and Research Design: Choosing Among Five Approaches**. 4<sup>th</sup> edition. New York: Sage publications

Cross, R. and Sproull, L. (2004) More Than an Answer: Information Relationships for Actionable Knowledge. **Organization Science**, 15 (4), pp. 446-462.

Cross, R., Parker, A. and Sasson, L. (eds.) (2003) **Networks in the knowledge Economy**. New York: Oxford University Press.

Crossan, M. M. and Apaydin, M. (2010) A Multi Dimensional Framework of Organizational Innovation: A Systematic Review of the Literature. **Journal of Management Studies**, 47 (6), pp.1154-1191.

Czerniawska, F. (2006) Ensuring sustainable value from consultants. MCA / PWC Report.

Daft, R. L. (1978) A dual-core model of organizational innovation. Academy of Management Journal, 21, pp. 193-210. In Wolfe, A. (1994) Organizational Innovation: Review, Critique and Suggested Research Directions. **Journal of Management Studies**, 31 (3), pp. 405-431.

Damanpour, F. (1988) Innovation types, radicalness, and the adoption process. **Communication Research**, 15, pp. 545-567.

Damanpour, F. (1991) Organizational Innovation: A Meta-Analysis of Effects of Determinants and Moderators. **Academy of Management Journal**, 34 (3), pp. 555-590.

Damanpour, F. (1996). Organizational complexity and innovation: developing and testing multiple contingency model. **Management Science**, 42, pp. 693-716.

Damanpour, F. and Gopalakrishnan, S. (2001) The Dynamics of the Adoption of Product and Process Innovations in Organizations. **Journal of Management Studies**, 38 (1), pp. 45-65.

Damanpour, F. and Aravind, D. (2006) Product and process innovations: A review of organizational and environmental determinants. In Hage, J and Meeus, M. (eds.) (2006) **Innovation, science, and institutional change**, pp. 38-66. Oxford: Oxford University Press.

Damanpour, F. and Wischnevsky, J. D. (2006) Research on innovation in organizations: Distinguishing innovation-generating from innovation-adopting organizations. **Journal of Engineering and Technology Management**, 23, pp. 269-291.

Damanpour, F. and Schneider, M. (2006) Phases of the Adoption of Innovation in Organizations: Effects of Environment, Organization and Top Managers. **British Journal of Management**, 17, pp. 215-236.

Damanpour, F., Walker, R. M. and Avallenada, C. N. (2009) Combinative Effects of Innovation Types and Organizational Performance: A Longitudinal Study of Service Organizations. **Journal of Management Studies**, 46 (4), pp. 650-675.

Daou, A., Karuranga, E. and Zhan, S. (2013) Intellectual Capital in Mexican SMEs From The Perspective Of The Resource-Based And Dynamic Capabilities Views. **Journal of Applied Business Research** (JABR), 29 (6), p.1673

Darroch, J. (2005) Knowledge management, innovation and firm performance. **Journal of Knowledge Management**, 9, pp. 101-115.

Davenport, T, H. and Prusak, L. (1998) Working Knowledge. Boston: Harvard Business School Press. In Grundstein, M., Rosenthal-Sabroux, C. and Pachulski, A. (2003) Reinforcing decision aid by capitalizing on company's knowledge: Future prospects. **European Journal of Operational Research**, 145, pp. 256-272.

DBIS (Department for Business, Innovation and Skills) (2014a) Innovation and economic growth: Government Economic Service Report [Online]. Available from <<u>http://www.gov.uk/</u> [Accessed 15 October 2015].

DBIS (Department for Business, Innovation and Skills) (2014b) First Findings from the UK Innovation Survey 2013 [Online]. Available from < <u>https://www.gov.uk</u>> [Accessed 15 October 2015].

DBIS (Department for Business, Innovation and Skills) (2016) Digital Skills for the UK Economy (January 2016) [Online]. Available from <<u>https://www.gov.uk</u>> [Accessed on 29 February 2018].

De Jong, J. P. J. and Vermeulen, P. A. M. (2003) Organising successful new service development: a literature review, **Management Decision**, 41 (9) pp. 844 -858.

De Jong, J. P. J., Bruins, A., Dolfsma, W. and Meijaard, J. (2003) Innovation in service firms explored: what, how and why? Zoetermeer, The Netherlands: **EIM Business & Policy Research**. In Casani, F., Rodriguez-Pomeda, J. and Alonso-Almeida, M. D. M. (2013) Innovation Patterns in Spanish SMEs

Operating in High Growth Industries. **Australian Journal of Basic and Applied Sciences**, 7 (4), pp. 575-579.

De Propris, L (2002) Types of innovation and inter-firm co-operation. **Entrepreneurship and Regional Development,** 14, pp. 337-353.

De Vries, E. J. (2006) Innovation in services in networks of organizations and in the distribution of services. **Research Policy**, 35, pp. 1037-1051.

Delgado-Verde, M., Martín de Castro, G. and Amores-Salvadó, J. (2016) Intellectual capital and radical innovation: Exploring the quadratic effects in technology-based manufacturing firms. **Technovation**, 54, pp. 35-47.

Deloitte (2015). Business Services Outlook 2015. A Deloitte Insight report [Online]. Available from <<u>http://www2.deloitte.com</u>/ [Accessed 20 April 2015].

Demartini, C. (2015) Relationships between Social and Intellectual Capital: Empirical Evidence from IC Statements. **Knowledge and Process Management**, 22 (2), pp. 99 – 111.

Den Hertog, P. (2000) Knowledge-intensive business services as co-producers of innovation. **International Journal of Innovation Management,** 4 (4), pp. 491-504.

Den Hertog, P. D., Van der Aa, W. and De Jong, M.W. (2010) Capabilities for managing service innovation: towards a conceptual framework. **Journal of Service Management**, 21 (4), pp. 490-514.

DePoy, E. and Gitlin, L. (2015) Introduction to Research. 4<sup>th</sup> ed. New York: Elsevier

Deprey, B., Lester Lloyd-Reason, L. and Ibeh, K. I. N. (2012) The internationalisation of small- and medium-sized management consultancies: an exploratory study of key facilitating factors. **The Service Industries Journal**, 32 (10), pp. 1609-1621.

DeSarbo, W. S., Benedetto, C. A., Song, M. and Sinha, I. (2005) Revisiting the miles and snow strategic framework: uncovering interrelationships between strategic types, capabilities, environmental uncertainty, and firm performance. **Strategic Management Journal**, 26, pp. 47-74.

Dietz, G. and Den Hartog, D. N. (2006) Measuring trust inside organisations. **Personnel Review**, 35 (5), pp. 557-588.

Djellal, F. and Gallouj, F. (2001) Patterns of innovation organisation in service firms: portal survey results and theoretical models. **Science and Public Policy**, 28, pp. 57-67.

Djellal, F., Gallouj, F. and Miles, I. (2013) Two decades of research on innovation in services: Which place for public services? **Structural Change and Economic Dynamics**, 27, pp. 98-117.

Drejer, I. (2004) Identifying innovation in surveys of services: A Schumpeterian perspective. **Research Policy**, 33, pp. 551-562.

Droege, H., Hildebrand, D. and Heras Forcada, M. A. (2009) Innovation in services: present findings, and future pathways. **Journal of Service Management**, 20 (2), pp. 131-155.

DTI (Department for Trade and Industry) (2003) **Competing in the global economy: The innovation challenge**. DTI Innovation Report (December 2003). London, DTI. [Online]. Available from <<u>https://www.gov.uk</u>> [Accessed 20 November 2015].

DTI (Department for Trade and Industry) (2007) **Innovation in Services**. DTI Occasional Paper No.9 (June, 2007). London, DTI. [Online]. Available from <<u>https://www.gov.uk</u>> [Accessed 20 November 2015].

Easingwood, C. and Percival, J. (1990) Evaluation of New Financial Services. **International Journal of Bank Marketing**, 8 (6), pp. 3-8.

Easterby-Smith, M., Thorpe, R. and Jackson, P. (2012) **Management Research**. 4<sup>th</sup> ed. London: Sage Publications Ltd.

Econsultancy (2017) Top 100 Digital Agencies Report From 2017. London: Econsultancy [Online]. Available from <<u>https://econsultancy.com> [Accessed on October 2017].</u>

Edgett, S. and Jones, S. (1991) New Product Development in the Financial Service Industry: A Case Study. **Journal of Marketing Management**, 7, pp. 271-284.

Edquist C. (1997) Systems of Innovation. London: Pinter. In Pérez-Luño, A., Cabello Medina, C., Carmona Lavado, A. and Cuevas Rodríguez, G. (2011) How social capital and knowledge affect innovation. **Journal of Business Research**, 64, pp. 1369-1376.

Edvardsson, B., Gustafsson, A., Johnson, M. D. and Sandén, B. (2000) **New Service Development and Innovation in the New Economy**. Lund (Sweden): Studentlitteratur AB.

Edvinsson. L. (1997) Developing intellectual capital at Skandia. Long Range **Planning**, 30 (3), pp. 366-373.

Edvinsson. L. and Malone, M.S. (1997) Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower. New York: Harper Business

Edvinsson. L. and Sullivan, P. (1996) Developing a model for managing intellectual capital. **European Management Journal**, 14 (4), pp. 356-364.

Edwards, T., Delbridge, R. and Munday, M. (2005) Understanding innovation in small and medium-sized enterprises: a process manifest. **Technovation**, 25, pp. 1119-1127.

Eisenhardt, K. M. (1991) Better stories and better constructs: The case for rigor and comparative logic. **Academy of Management Review**, 16, pp. 620-627.

Eisenhardt, K. and Martin, J. A. (2000) Dynamic Capabilities: What are they? **Strategic Management Journal**. 21, pp. 1105 – 1121.

Eklinder-Frick, J., Eriksson, L. T. and Hallén, L. (2014) Multidimensional social capital as a boost or a bar to innovativeness. **Industrial Marketing Management**, 43 (3), pp.460-472.

Elliott, J. (2005) **Using Narrative in Social Research: Qualitative and Quantitative Approaches**. London: Sage Publications Ltd.

Ettlie, J. E. and Vellenga, D. B. (1979) The adoption time period for some transportation innovations. **Management Science**, 25 (5), pp. 429-443.

Ettlie, J. E. and Reza, E. M. (1992) Organizational integration and process innovation. **Academy of Management Journal**, 35(4), pp. 795-827.

Ettlie, J. E. and Rosenthal, R. (2011) Service versus Manufacturing Innovation. **Journal of Product Innovation Management**, 28 (2), pp. 285-299.

Eunni, V. R., Kasuganti, R. R. and Kos, J. A. (2006) Knowledge management process in international business alliances: a review of empirical research, 1990–2003. **International Journal of Management**, 23 (1), pp. 34-42.

Evangelista, R. (2000) Sectoral patterns of technological change in services. **Economics of Innovation and New Technology**, 9, pp.183-221.

Evangelista, R. and Sirili, G. (1998) Innovation in the service sector: results from the Italian Statistical Survey. **Technological Forecasting and Social Change**, 58, pp. 251-269.

F-Jardon, C. M. and Gonzalez-Loureiro, M. (2013) Human Capital as a Source for Sustained Competitive Advantages in SMEs: A Core Competencies Approach. **Economia: Seria Management**, 16 (2), pp. 255 – 276.

FT (Financial Times) (2018) The UK economy at a glance [Online]. Available from <<u>https://www.ft.com/></u> [Accessed 29 February 2018].

FT (Financial Times) (2017a) Why are the UK's manufacturing data so contradictory? [Online]. Available from <<u>https://www.ft.com/></u> [Accessed on 29 February 2018].

FT (Financial Times) (2017b) Brexit and outmoded education put UK's tech ambition at risk. Financial Times [Online]. Available from <<u>https://www.ft.com></u> [Accessed on 29 February 2018].

Filieri, R., McNally R. C., O'Dwyer, M. and O'Malley, L. (2014) Structural social

capital evolution and knowledge transfer: Evidence from an Irish pharmaceutical network. **Industrial Marketing Management,** 43, pp. 429-440.

Fong Boh, W., Evaristo, R. and Ouderkirk, A. (2014) Balancing breadth and depth of expertise for innovation: A 3M story. **Research Policy**, 43, pp. 349-366.

Fombrun, C. J. (1982) Strategies for Network Research in Organizations. Academy of Management Review, 7 (2), pp. 280-291.

Frankenberger, K., Weiblen, T. and Gassmann, O. (2013) Network configuration, customer centricity, and performance of open business models: A solution provider perspective. **Industrial Marketing Management** 42, pp. 671-682.

Frambach, R. T. and Schillewaert, N. (2002) Organizational innovation adoption. A multi-level framework of determinants and opportunities for future research. **Journal of Business Research**, 55, pp. 163-176.

Freeman, C. and Soete, L. (1997) **The Economics of Industrial Innovation**. London: Routledge.

Fukuyama, F. (2001) Social Capital, civil society and development. **Third World Quarterly**, 22 (1), pp. 7-20.

Gabbay, S. H. and Leenders, R. T. A. J. (2001) Social Capital of Organizations: From social structure to the management of corporate social capital. **Social Capital of Organizations**. Published online, pp. 1-20.

Gadrey, J., Gallouj, F. and Weinstein, O. (1995) New modes of innovation. **International Journal of Service Industry Management**, 6 (3), pp. 4-16.

Gadrey, J. and Gallouj, F. (1998) The Provider-Customer Interface in Business and Professional Services. **The Service Industries Journal**, 18 (2), pp. 01-15.

Gallouj F. (1991), Les formes de l'innovation dans les services de conseil. **Revue d'économie industrielle**, 57 (3) p. 25-45.

Gallouj, F. (1998) Innovating in reverse: Services and the reverse product life cycle. **European Journal of Innovation Management**, 1 (3), pp.123-138.

Gallouj, F. and Savona, M. (2010) Towards a theory of innovation in services: a state of the art. In Gallouj, F. and Djellal, F. (eds.) (2010) **The Handbook of Innovation and Services: A Multi-disciplinary Perspective.** Cheltenham: Elgar Publishing Ltd, pp. 27-48.

Gallouj, F. and Weinstein, O. (1997) Innovation in Services. **Research Policy**, 26, pp. 537-556.

Gamble, P. R. and Blackwell, J. (2001) **Knowledge Management: A State of the Art Guide**. London: Kogan Page Ltd.

Gandia, R. (2013) The Digital Revolution and Convergence in the Videogame and Animation Industries: Effects on the Strategic Organization of the Innovation Process. **International Journal of Arts Management**, 15 (2), pp. 32-44.

Gans, H. J. (1974) Gans on Granovetter's "Strength of weak ties". **American Journal** of **Sociology**, 20, pp. 524-527.

Garud, P., Tuertscher, P. and Van de Ven, A. H. (2013) Perspectives on Innovation Processes. **The Academy of Management Annals**, 7 (1), pp. 775-819.

Gerke, A., Dickson, G., Desbordes, M. and Gates, S. (2017) The role of Interorganizational citizenship behaviors in the innovation process. **Journal of Business Research**, 73, pp. 55-64.

Glanville, J. L. and Bienenstock, E.J. (2009) A Typology for Understanding the Connections Among Different Forms of Social Capital. **American Behavioral Scientists**, 52 (11), pp. 1507-1530.

Gogan, L. M., Duran, D. C. and Draghici, A. (2015) Structural Capital – A proposed measurement model. **Procedia Economics and Finance**, 23, pp.1139-1146.

Goldstein, S. M., Johnston, R., Duffy, J. A. and Rao, J. (2002) The service concept: the missing link in service design research? **Journal of Operations Management**, 20, pp. 121-134.

Gopalakrishnan, S. and Damanpour, F. (1997) Economics, of Innovation Research in Sociology and Technology Management. **International Journal of Management Science**, 25 (1), pp. 15-28.

Gottfridsson, P. (2011) Development of New Services in Smaller Organisations: They Do Just Happen. **Australian Journal of Business and Management Research**, 1 (7), pp. 91-99.

Gov UK. (Government UK) (2012) Department for Business and Skills (BIS Economics paper no 18 – Industrial strategy: UK sector analysis, September 2012) [Online]. Available from <<u>http://www.gov.uk</u>> [Accessed on 20 November 2015].

Gov UK (Government UK) (2015) Growth dashboard [Online]. Available from <<u>http://www.gov.uk/</u>> [Accessed 28 February 2018].

Gov UK. (Government UK) (2017a) Policy paper UK Digital Strategy 2017 (March 2017) Department for Digital, Culture, Media and Sport [Online]. Available from <a href="https://www.gov.uk/">https://www.gov.uk/</a> [Accessed 28 February 2018].

Gov UK (Government UK) (2017b) The Government's mandate to NHS England for 2017-2018. Department of Health [Online]. Available from <<u>http://www.gov.uk/</u>> [Accessed 28 February 2018].

Granovetter, M. S. (1973) The strength of weak ties. **American Journal of Sociology**, 78 (6), pp. 1360-1380.

Granovetter, M. (1985) Economic Action and Social Structure: The Problem of Embeddedness. **American Journal of Sociology**, 91 (3), pp. 481-510.

Granovetter, M. (1992) Problems of explanation in economic sociology. In Nohria, N. and Eccles, R. G. (eds.) (1992) Networks and organizations: Structure, form, and action, pp. 25-56. Boston: Harvard Business School Press. Cited in Hansen, E. L. (1995) Entrepreneurial Networks and New Organizations Growth. **Entrepreneurship Theory and Practice**. Baylor University. Summer, pp. 7-19.

Gremyr, I., Witell, L., Löfberg, N., Edvardsson, B. and Fundin, A. (2014) Understanding new service development and service innovation through innovation modes. **Journal of Business and Industrial Marketing**, 29 (2), pp. 123-131.

Grimaldi, M., Cricelli, L. and Rogo, F. (2012) A methodology to assess value creation in communities of innovation. **Journal of Intellectual Capital**, 13 (3), pp. 305-330.

Grimpe, C. and Kaiser, U. (2010) Balancing Internal and External Knowledge Acquisition: The Gains and Pains from R&D Outsourcing. **Journal of Management Studies**, 47 (8), pp. 1483-1509.

Gronum, S., Verreynne, M-L. and Kastelle, T. (2012) The Role of Networks in Small and Medium-Sized Enterprise Innovation and Firm Performance. **Journal of Small Business Management**, 50 (2), pp. 257-282.

Grönroos, C. (1990) Service Management: A Management Focus for Service Competition. International Journal of Service Industry Management, 1 (1) pp. 6-14.

Grundstein, M. (2000) From Capitalizing on Company Knowledge to Knowledge Management. In Daryl Morey, D., Maybury, M. T. and Thuraisingham, B. M. (eds.) (2002) **Knowledge Management: Classic and Contemporary Works**. Cambridge (MA): The MIT Press.

Grundstein, M., Rosenthal-Sabroux, C. and Pachulski, A. (2003) Reinforcing decision aid by capitalizing on company's knowledge: Future prospects. **European Journal of Operational Research**, 145 (2), pp. 256-272.

Guba, E. G., and Lincoln, Y. S. (1994) Competing paradigms in qualitative research. In Denzin, N.K. and Lincoln, Y.S. (eds.) **Handbook of qualitative research**, Thousand Oaks, CA: Sage. pp. 105-117.

Gulati, R., Khanna, T. and Nohria, N. (1994) Unilateral commitments and the importance of process in alliances. Sloan Management Review, 35 (3), pp. 61-69. In Gulati, R., Nohria, N. and Zaheer, A. (2000) Strategic Networks. **Strategic Management Journal**, 21 (3), pp. 203-215.

Gulati, R., Nohria, N. and Zaheer, A. (2000) Strategic Networks. **Strategic Management Journal**, 21 (3), pp. 203-215.

Gulati, R., Dialdin, D. A and Wang. L. (2002) Organizational networks. In Hage, J. and Meus, M. (eds.) (2006) **Innovation Science and Institutional Change: A Research Handbook**. New York: Oxford University Press.

Gupta, V. K., Huang, R. and Yayla, A. A. (2011) Social Capital, Collective Transformational Leadership, and Performance: A Resource-Based View of Self-Managed Teams. **Journal of Managerial Issues**, 23 (1), pp. 31 – 45.

Gurrieri, A. R. (2008) Knowledge network dissemination in a family-firm sector. **The Journal of Socio-Economics**, 37, pp. 2380-2389.

Haas, M. R. and Hansen, M. T. (2007) Different Knowledge, Different Benefits: Towards a Productivity Perspective on knowledge sharing in Organizations. **Strategic Management Journal**, 28, pp. 1133-1153.

Hage, J. T. (1999) Organizational Innovation and Organizational Change. **Annual Review of Sociology**, 25, pp. 597-622.

Hambrick, D. C. and Mason, P. A. (1984) Upper Echelons: The Organization as a Reflection of Its Top Managers. **The Academy of Management Review**, 9 (2), pp. 193-206.

Hansen, M. T. (1999) The Search-Transfer Problem: The Role of Weak Ties in Sharing Knowledge across Organization Subunits. **Administrative Science Quarterly**, 44, pp. 82-111.

Hansen, S. O. and Wakomen, J. (1997) Innovation, a winning solution? International Journal of Technology Management, 13, pp. 345-58. In Crossan, M. M. and Apaydin, M. (2010) A Multi Dimensional Framework of Organizational Innovation: A Systematic Review of the Literature. **Journal of Management Studies,** 47 (6), pp. 1154-1191.

Hecker, A. (2012) Knowledge Beyond the Individual? Making Sense of a Notion of Collective Knowledge in Organization Theory. **Organization Studies**, 33 (3), pp. 423-445.

Herremans, I. M., Isaac, R. G., Kline, T. J. B. and Nazari, J. A. (2011) Intellectual Capital and Uncertainty of Knowledge: Control by Design of the Management System. **Journal of Business Ethics**, 98, pp. 627-640.

Herrera, L., Muñoz-Doyague, M. F. and Nieto, M. (2010) Mobility of public researchers, scientific knowledge transfer, and the firm's innovation process. **Journal of Business Research**, 63, pp. 510-518.

Heusinkveld, S. and Benders, J. (2002) Between Professional Dedication and Corporate Design. Exploring Forms of New Concept Development in Consultancies. **International Studies of Management and Organization**, 32 (4), pp. 104-122.

Hipp. C. and Grupp, H. (2005) Innovation in the service sector: The demand for service-specific innovation measurement concepts and typologies. **Research Policy**,

34, pp. 517-535.

Hipp, C. (2008) Service peculiarities and the specific role of technology in service innovation management. International Journal of Services Technology and Management, 9, pp. 154-173.

Hipp, C. (2010) Collaborative innovation in services. In Gallouj, F. and Djellal, F. eds (2010) The Handbook of Innovation and Services: A Multi-disciplinary Perspective. Cheltenham, Elgar Publishing Ltd, pp. 318-341.

Hitt, M. A., Bierman, L., Uhlenbruck, K. and Shimizu, K. (2006) The importance of ressources in the internationalization of professional service firms: the good, the bad and the ugly. Academy Management Journal, 49, pp. 1137 – 1157. In Hitt, M. A., Xu, K. and Matz Carnes, C. (2016) Resource based theory in operations management research. Journal of Operations Management, 41, pp. 77 – 94.

Hitt, M. A., Xu, K. and Matz Carnes, C. (2016) Resource based theory in operations management research. Journal of Operations Management, 41, pp. 77 – 94.

Hoang, H. and Antoncic, B. (2003) Network-based research in entrepreneurship: A critical review. Journal of Business Venturing, 18 (2), pp. 165-187.

Hogan, S. J., Souter, G. N., McColl-Kennedy, J. R. and Sweeney, J. C. (2011) Reconceptualizing professional service firm innovation capability: Scale development. Industrial Marketing Management, 40, pp. 1264-1273.

Honig, B., Lerner, M. and Raban, Y. (2006) Social Capital and the Linkages of High-Tech Companies to the Military Defence System: Is there a Signalling. Mechanism? Small Business Economics, 27, pp. 419-437.

Howells, J. (2001) Tacit Knowledge, Innovation and Economic Geography. Urban Studies, 39 (5-6), pp. 871-884.

Howells, J. (2010) Services and innovation and service innovation: new theoretical directions. In Gallouj, F. and Djellal, F. (eds.) (2010) The Handbook of Innovation and Services: A Multi-disciplinary Perspective. Cheltenham, Elgar Publishing Ltd, pp. 68-83.

Huang, Y. and Wilkinson, I.F. (2013) The dynamics and evolution of trust in business relationships. Industrial Marketing Management, 42 (3), pp. 455-465.

Hughes. J., Campbell, A. and Jenkins, R. (2011) Contact, trust and social capital in Northern Ireland: a qualitative study of three mixed communities. Ethnic and Racial Studies, 34 (6), pp. 967-985.

IMF (2018) 2017 IMF Country Report No, 18/42. International Monetary Fund. (February, 2018) [Online]. Available from <a href="http://www.imf.org">http://www.imf.org</a> [Accessed on 29] February 2018].

Inkpen, A. C. and Tsang, E. W. K. (2005) Social Capital, Networks and Knowledge 389

Transfer. Academy of Management Review, 30 (1), pp. 146-165.

Innovate UK (2015) **Digital Economy Strategy 2015-2018** [Online]. Technology Strategy Board. Available from <a href="http://www.gov.uk/government/publications">http://www.gov.uk/government/publications</a> [Accessed 18 January 2016].

Jackson, S. and Jones, J. (1998) **Contemporary Feminist Theories**. Edinburgh: Edinburgh University Press.

Jensen, M. B. (2008) Online marketing communication potential: Priorities in Danish firms and advertising agencies. **European Journal of Marketing**, 42, pp. 502-525.

Jiang, R. J., Tao, Q. T. and Santoro, M. D. (2010) Alliance portfolio diversity and firm performance. Strategic Management Journal, 31(10), pp. 1136 - 1144.

Jiménez-Zarco, A. I., Martínez-Ruiz, M. P. and Izquierdo-Yusta, A. (2011) The impact of market orientation dimensions on client cooperation in the development of new service innovations. **European Journal of Marketing**, 45 (1/2), pp. 43-67.

Julien, P. A., Andriambeloson, E. and Ramangalahy, C. (2004) Networks, weak signals and technological innovations among smes in the land-based transportation equipment sector. **Entrepreneurship and Regional Development**, 16 (4), pp. 251-269.

Johannessen, J. A. (1998) Organisations as social systems: the search for a systemic theory of organizational innovation processes. **Kybernetes**, 27 (4), pp. 359-387.

Kalkan, A., Çetinkaya Bozkurt, Ö. and Arman, M. (2014) The impacts of intellectual capital, innovation and organizational strategy on firm performance. **Science and Behavioral Sciences**, 150, pp. 700-707.

Kamukama, N. (2013) Intellectual capital: company's invisible source of competitive advantage. **Competitiveness Review: An International Business Journal**, 23 (3) pp. 260-283.

Kandampully, J. (2002) Innovation as the core competency of a service organisation: the role of technology, knowledge and networks. **European Journal of Innovation Management**, 5 (1), pp. 18-26.

Kazadi, K., Lievens, A. and Mahr, D. (2016) Stakeholder co-creation during the innovation process: Identifying capabilities for knowledge creation among multiple stakeholders. **Journal of Business Research**, 69, pp. 525-540.

Kelly, D. and Storey, C. (2000) New service development: initiation strategies. **International Journal of Service Industry Management**, 11 (1), pp. 45-63.

Khalique, M., Nassir Shaari, J. A. and Md. Isa, A. H. (2011) Intellectual Capital and Its Major Components. **International Journal of Current Research**, 3 (6) pp. 343 – 347.

Kianto, A., Sanez, J. and Aramburu, N. (2017) Knowledge-based human resource management practices, intellectual capital and innovation. **Journal of Business Research**, 81, pp. 11-20.

Kilduff, M. and Tsai, W. (2012) **Social and Networks Organizations**. London: Sage Publication.

Kindström, D., Kowalkowski, C. and Sandberg, E. (2013) Enabling service innovation: A dynamic capabilities approach. **Journal of Business Research**, 66, pp. 1063-1073.

Kogut, B. and Zander, U. (1992) Knowledge of the firm, combinative capabilities, and the replication of technology. **Organization Science**, 3 (3), pp. 383-397.

Koka, B. R. and Prescott, J. E. (2002) Strategic alliances as social capital: a multidimensional view. **Strategic Management Journal**, 23, pp. 995-816.

Koskinen, K. U. and Vanharanta, H. (2002) The role of tacit knowledge in innovation process of small technology companies. **International Journal of Production Economics**, 80, pp. 57-64.

Kraaijenbrink, J. (2011) Human Capital in the Resource-Based View. The **Oxford Handbook of Human Capital**, pp. 1 – 24.

Krackhardt, D. (1989) Graph theoretical dimensions of informal organization. Paper presented at the annual meeting of the Academy of Management, Washington, DC. In Nahapiet, J. and Ghoshal, S. (1998) Social Capital Intellectual Capital and the Organizational advantage. **Academy of Mangement Review**, 23 (2), pp. 242-256.

Lamont, M. and White, P. (2008) **Workshop on interdisciplinary standards for systematic qualitative research**. Natural Science Foundation [Online]. Available from < <u>https://scholar.harvard.edu/></u> [Accessed on 29 February 2018].

Landry, R., Amara, N. and Lamari, M. (2002) Does social capital determine innovation? To what extent? **Technological Forecasting & Social Change**, 69, pp. 681-701.

Laursen, K., Masciarelli, F. and Prencipe, A. (2012) Regions Matter: How Localized Social Capital Affects Innovation and External Knowledge Acquisition. **Organization Science**, 23 (1), pp. 177-193.

Lawson, B., Tyer, B. T. and Cousins, P. D. (2008) Antecedents and consequences of social capital on buyer performance improvement. **Journal of Operations Management**, 26 (3), pp. 446-460.

Le Nguyen, H. and Felicitas, E. (2007) Acquiring tacit and explicit marketing

knowledge from foreign partners in IJVs. **Journal of Business Research**, 60 (11), pp. 1152-1165.

Leana, C. R. and Pil, K. P. (2006) Social Capital and Organizational Performance: Evidence from Urban Public Schools. **Organization Science**, 17 (3), pp. 353-366.

Lechner, C., Frankenberger, K. and Floyd, S. W. (2010) Task contingencies in the curvilinear relationships between intergroup networks and initiative performance. **Academy of Management Journal**, 53 (4), pp. 865-889.

Lee, S., Park, G., Yoon, B. and Park, J. (2010) Open innovation in SMEs-An intermediated network model. **Research Policy**, 39 (2), pp. 290-300.

Leitner, K. (2011) The effect of intellectual capital on product innovativeness in SMEs. **International Journal of Technology Management**, 53 (1), pp. 1-18.

Levin, D. Z. and Cross, R. (2004) The Strength of Weak Ties You Can Trust: The Mediating Role of Trust in Effective Knowledge Transfer. **Management Science**, 50, pp. 1477-1490.

Levy, S. J. and Kellstadt, C. H. (2012) Intègraphy: A multi-method approach to situational analysis. **Journal of Business Research**, 65, pp.1073-1077.

Lin, N. (1999) Social Networks and Status Attainment. **Annual Review of Sociology**, 25, pp. 467-487.

Lin, N. (2001) **Social Capital: a Theory of Social Structure and Action**. Cambridge: Cambridge University Press.

Lindstrom, M. (2014) Does social capital include trust? Commentary on Carpiano and Fitterer (2014). **Social Science and Medicine**, 116, pp. 235-236.

Liu, C. H. (2017), The relationships among intellectual capital, social capital, and performance – The moderating role of business ties and environmental uncertainty. **Tourism Management**, 61, pp. 553 – 561.

Macaulay, L. A., Miles, I., Wilby, J., Leng Tan, Y., Zhao, L. and Theodoulidis, B. (eds.) (2012) **Case Studies in Service Innovation**. New York: Springer.

Machado Engelman, R., Fracasso, E. M., Schmidt, S. and Zen Carneiro, A. (2017) Intellectual capital, absorptive capacity and product innovation. **Management Decision**, 55 (3), pp. 474-490.

Mahr, D., Lievens, A., and Blazevic, V. (2014) The value of customer cocreated knowledge during the innovation process. **Journal of Product Innovation Management**, 31 (3), pp. 599-615.

Malterud, K., Siersma, V. D. and Guassora, A. D. (2016) Sample Size in Qualitative Interview Studies: Guided by Information Power. **Qualitative Health Research**, 26 (13), pp. 1753-1760.

Mansury, M. A. and Love, J. H. (2008) Innovation, productivity and growth in US business services: a firm-level analysis. **Technovation**, 28(1-2), pp. 52-62.

Marchant, G. and Robinson, J. (2009) Is Knowing the Tax Code All it Takes to Be a Tax Expert? On the Development of Legal Expertise. In Sternberg, R. J. and Horvarth, J. A. (eds.) (2009) **Tacit Knowledge in Professional Practice: Researcher and Practitioner Perspectives**. New Jersey: Lawrence Erlbaum Associates, Publishers.

Marketing Week (2018) UK ad market growth to slow in 2018 as digital spend decelerates [Online]. Available from <<u>https://www.marketingweek.com</u>/> [Accessed on 28 February 2018].

Marsden, P. V. and Campbell, K. E. (1984) Measuring Tie Strength. **Social Forces**, 3 (2), pp. 482-501.

Martins, E. C. and Terblanche, F. (2003) Building organisational culture that stimulates creativity and innovation. **European Journal of Innovation Management**, 6 (1), pp. 64-74.

Martínez-Cañas, R., Sáez-Martínez, F. J. and Palomino-Ruiz, P. (2012) Knowledge acquisition's mediation of social capital-firm innovation. **Journal of Knowledge Management**, 16 (1), pp. 61-76.

Mascia, D. and Di Vincenzo, F. (2011) Understanding hospital performance: the role of network ties and patterns of competition. (Report). **Health Care Management Review**, 36 (4), p. 327 – 338.

Matthies, B. (2014) Process Capital: A Synthesis of Research and Future Prospects. **Knowledge and Process Management,** 21 (2), pp. 91-102.

Maurer, I., Bartsch, V. and Ebers, M. (2011) The Value of Intra-organizational Social Capital: How it Fosters Knowledge Transfer, Innovation Performance, and Growth. **Organization Studies**, 32 (2), pp. 157-185.

McDermott, C. M. and Prajogo, D. I. (2010) Service innovation and performance in SMEs. **International Journal of Operations and Production Management**, 32 (2), pp. 216-237.

McDowell, W. C., Peake, W. O., Coder, L. and Harris, M. L. (2018) Building small firm performance through intellectual capital development: Exploring innovation as the "black box". **Journal of Business Research**, (2018), pp. 1-7.

Melián-González, A., Batista-Canino, R. M. and Sánchez–Medina, A. (2010) Identifying and assessing valuable resources and core capabilities in public organizations. **International Review of Administrative Sciences**, 76 (1), pp. 97 – 114. Menon, T. and Pfeffer, J. (2003) Valuing Internal vs. External Knowledge: Explaining the Preference for Outsiders. **Management Science**, 49 (4), pp. 497-513.

Merriam, S. B. (2009) **Qualitative Research: A Guide to Design and Implementation**. San Francisco: Wiley.

Migheli, M. (2011) Capabilities and Functionings: The Role of Social Capital for Accessing New Capabilities. **Review of Political Economy**, 23 (1), pp. 133 – 142.

Miles, I., Kastrinos, N., Flanagan, K., Bildebeek, R., Den Hertog, P., Huntink, W. and Bouman, M. (1994) Knowledge Intensive Business Services: Their Roles as Users, Carriers and Sources of Innovation. **PREST, Manchester University.** 

Miles, I. (2000) Service Innovation: coming of age in the knowledge based economy. **International Journal of Innovation Management,** 4 (4), pp. 371-389.

Miles, I. (2005) Innovation in Services, pp. 433-457. In Fagerberg, J., Mowery, D. C. and Nelson, R. R. (eds.) (2006) **The Oxford Handbook of Innovation**. New York: Oxford University Press.

Miles, I. (2008) Patterns of innovation in service industries. **IBM Systems Journal**, 47 (1), pp. 115-128.

Miles, M. B., Huberman, M. A. and Saldaña, J. (2014) **Qualitative Data Analysis: A Methods Sourcebook**. 3<sup>rd</sup>. ed. Thousand Oaks, CA: Sage Publication Inc.

Mintzberg, H. (1979) **The Structuring of Organizations**. New Jersey, USA: Prentice Hall.

Miozzo, M. and Soete, L. (2001) Internationalization of services: a technological perspective. **Technology Forecasting and Social Change**, 67, pp. 159-185.

Miozzo, M. and Miles, I. (2003). **Internationalization, Technology and Services**. Cheltenham: Elgar Publishing.

Mironova, A. A. (2015) Trust, Social Capital, and Subjective Individual Well-Being. **Sociological Research**, 54 (2), pp. 121-133.

Mishra, A. A. and Shah, R. (2009) In union lies strength: Collaborative competence in new product development and its performance effects. **Journal of Operations Management**, 27, pp. 324 – 338.

Mitrega, M., Forkmann, S., Zaefarian, G. and Henneberg, S. C. (2017) Networking capability in supplier relationships and its impact on product innovation and firm performance. **International Journal of Operations and Product Management**, 37 (5), pp. 577-606.

Molina-Morales, F. X. and Martínez-Fernández, M. T. (2010) Social Networks: Effects of Social Capital on Firm Innovation. **Journal of Small Business**  Management, 48 (2), pp. 258-279.

Möllering, G. (2002) Perceived trustworthiness and inter-firm governance: empirical evidence from the UK printing industry. **Cambridge Journal of Economics**, 26, pp. 139-160.

Moore, S., Daniel, M., Paquet, C., Dube, L. and Gauvin, L. (2009) Association of individual network social capital with abdominal adiposity, overweight and obesity. **Journal of Public Health**, 31, pp. 175-183.

Moran, P. (2005) Structural vs Relational Embeddedness: Social Capital and Managerial Performance. **Strategic Management Journal**, 26, pp. 1129-1151.

Mouw, T. (2006) Estimating the Causal Effect of Social Capital: A Review of Recent Research. **Annual Review of Sociology**, 32, pp. 79-102.

Nahapiet, J. and Ghoshal, S. (1998) Social Capital Intellectual Capital and the Organizational advantage. **Academy of Management Review**, 23 (2), pp. 242-256.

Ngo, L. V. and O'Cass, A. (2013) Innovation and business success: The mediating role of customer participation. **Journal of Business Research**, 66, pp. 1134-1142.

NIESR (National Institute of Economic and Social Research) (2013) Measuring the UK's Digital Economy with Big Data. National Institute of Economic and Social Research (July, 2013) [Online]. Available from <<u>https://www.niesr.ac.uk/</u>> [Accessed on 28 February 2018].

Nieves, J. and Haller, S. (2014) Building Dynamic capabilities through knowledge resources. **Tourism Management**, 40, pp. 224 – 232.

Nonaka, I. (1994) A dynamic theory of organizational knowledge creation. **Organizational Science**, 5, pp. 14-37.

Nonaka, I. and Takeuchi, H. (1995) **The Knowledge Creating Company**. New York: Oxford University Press.

Nyberg, A. J., Moliterno, T. P., Hale, D. and Lepak, D. P. (2014) Resource-Based Perspectives on Unit-Level Human Capital: A Review and Integration. **Journal of Management**, 40 (1), pp. 316 – 346.

O'Donnell, A. (2004) The nature of networking in small firms. **Qualitative Market Research: An international Journal,** 7 (3), pp. 206-217.

O'Gorman, K. D. and MacIntosh, R. (2014) **Research Methods for Business and Management: A Guide to Writing Your Dissertation**. Oxford: Goodfellow Publishers.

O'Mahoney, J. (2011) **Management innovation in the UK consulting industry**. Chartered Management Institute, London. [Online]. Available from <<u>http://www.aimresearch.org</u>> [Accessed 24 June, 2015]. Obstfeld, D. (2005) Social networks, the Tertius lungens orientation, and involvement in innovation. **Administrative Science Quarterly**, 50 (1), pp. 100-130.

OECD (2017a) Services Trade Policies and the Global Economy: The rise of services in the global economy [Online]. Available from <<u>http://oecd.org/</u>> [Accessed 29 February 2018].

OECD (2017b) Economic survey of the United Kingdom 2017 [Online]. Available from <<u>http://www.oecd.org/</u>> [Accessed 29 February 2018].

Olkkonen, R., Tikkanen, H. and Alajoutsijarvi, K. (2000) The role of communication in business relationships and networks. **Management Decision**, 38 (6), pp. 403-409.

Oliver, G. R. (2013) A micro intellectual capital knowledge flow model: a critical account of IC inside the classroom. **Journal of Intellectual Capital**, 14 (1), pp. 145-162.

Ommen, N. O., Blut, M., Backhaus, C. and Woisetschläger, D. M. (2016) Toward a better understanding of stakeholder participation in the service innovation process: More than one path to success. **Journal of Business Research**, 69, pp. 2409-2416.

ONS (Office for National Statistics) (2017a) Index of Services, UK (June 2017) Statistical bulletin [Online]. Available from <<u>http://www.ons.gov.uk/</u>> [Accessed 29 February 2018].

ONS (Office for National Statistics) (2017b) Overview of the UK population: July 2017. (July 2017) [Online]. Available from <u>https://www.ons.gov.uk/</u> [Accessed on 12 March, 2018].

Osinski, M., Selig, P. M., Matos, F. and Roman, D. J. (2017) Methods of evaluation of intangible assets and intellectual capital. **Journal of Intellectual Capital**, 18 (3), pp. 470-485.

Oxford Economics (2017) The Economic Impact of Universities in 2014-2015. Report for Universities UK (October, 2017) [Online]. Available from <<u>http://www.universitiesuk.ac.uk/></u> [Accessed on 29 February 2018].

Parliament UK (2017a) Tackling the under-supply of housing in England [Online]. Available from <<u>http://researchbriefings.parliament.uk/</u>> [Accessed on 29 February 2018].

Parliament UK (2017b) Manufacturing: statistics and policy, Briefing paper number 01942 2 (January 2017) House of Commons Library [Online]. Available from <<u>http://researchbriefings.parliament.uk/</u>> [Accessed on 29 February 2018].

Passiante, G., Elia, V. and Massari, T. (eds.) (2003) **Digital Innovation: Innovation Processes in virtual clusters and digital regions**. Series on Technology Management, vol 8. London: Imperial College Press.
Patton, M. Q. (1987) **How to Use Qualitative Methods in Evaluation**. London: Sage Publications.

Partanen, J., Möller, K., Westerlund, M., Rajala, R. and Rajala, A. (2008) Social capital in the growth of science-and-technology-based SMEs. Industrial Marketing Management, 37, pp. 513-522.

Payne, G. T., Moore, C. B., Griffis, S. E. and Autry. C. W. (2011) Multilevel Challenges and Opportunities in Social Capital Research. **Journal of Management**, 37 (2), pp. 491-520.

Peppard, J. and Rylander, A. (2001) Using an Intellectual Capital Perspective to Design and Implement a Growth Strategy: The Case of AP*i*on. **European Management Journal**, 19 (5), pp. 510-525.

Pérez-Luño, A., Cabello Medina, C., Carmona Lavado, A. and Cuevas Rodríguez, G. (2011) How social capital and knowledge affect innovation. **Journal of Business Research**, 64, pp. 1369-1376.

Peteraf, M. A. (1993) The cornerstones of competitive advantage: a resource-based view. **Strategic Management Journal**, 14 (3), pp. 179-192.

Phelps, C., Heidl, R. and Wadhwa, A. (2012) Knowledge, Networks, and Knowledge Networks: A Review and Research Agenda. **Journal of Management**, 38 (4), pp. 1115-1166.

Pires, C. P., Sarkar, S. and Carvalho, L. (2008) Innovation in services – how different from manufacturing? **The Service Industries Journal**, 28 (10), pp. 1339-1356

Polanyi, M. (1966) The Tacit Dimension. New York: Anchor Day Books.

Porter, M. E. (1996) What is Strategy? Harvard Business Review, 74 (6), pp. 61-78.

Porter, M. and Ketels, C. H. M. (2003) UK Competitiveness: Moving to the Next Stage. Management Research Forum, Summary Report 6. London: Advanced Institute of Management Research, London [Online]. Available from <<u>http://www.aimresearch.org/AIM</u>> [Accessed 25 January, 2014].

Potts, J. and Mandeville, T. (2007) Toward an Evolutionary Theory of Innovation and Growth in the Service Economy. **Prometheus**, 25 (2), pp. 147-159.

Preston, P., Kerr, A. and Cawley, A. (2009) Innovation and knowledge in the digital media sector. **Information, Communication & Society**, 12 (7) pp. 994-1014.

Preissl, B. (2000) Service Innovation: What Makes it Different? Empirical Evidence from Germany, pp. 125-148. In Metcalfe, J. S. and Miles, I. (eds.) (2000) **Innovation Systems in the Service Economy. Measurement and Case Study Analysis**. Boston: Kluwer

Putnam, R. D. (1995) Bowling Alone: America's Declining Social Capital. Journal of

Democracy, 6 (1), pp. 65-78.

PWC (2015) UK Economic Outlook – Summary Report – July 2015 [Online]. Available from <a href="https://www.pwc.co.uk/economics">https://www.pwc.co.uk/economics</a> [Accessed 1 August, 2015].

PWC (2018) Demographic and social change (Megatrends) [Online]. Available from <u>https://www.pwc.co.uk</u> [Accessed on 29 February 2018].

Quinn Patton, M. (2002) **Qualitative Research & Evaluation Methods**. 3<sup>rd</sup> ed. London: Thousand Oaks, CA: Sage Publications Inc.

Radenović, T. and Krstić, B. (2017) Intellectual Capital as the Source of Competitive Advantage: The Resource-Based View. **Facta Universitatis: Series: Economics and Organization**, 14 (2), pp 127 – 137.

Rahim, N. A., Mohd Kamal, M. H. and Che Mat, R. (2011) Structural Capital and Its Effect on Organizational Performance: A Case Study of Telekom Malaysia Berhad (TM) Headquarters. 2011 IEE Colloquium on Humanities, Science and Engineering Research (CHUSER, 2011) December 5-6 2011, Penang.

Randhawa, K. and Scerri, M. (2015) Service Innovation: A Review of the Literature. In Agarwal, R., Selen, W., Roos, G. and Green, R. (eds.) (2015) **The Handbook of Service Innovation**. London: Springer, pp. 5-25.

Rauter, R., Globocnik, D., Perl-Vorbach, E. and Baumgartner, R. J. (2018) Open innovation and its effects on economic and sustainability innovation performance. **Journal of Innovation and Knowledge**, (April, 2018), pp. 1-8.

Reuters (2017) Political instability set to impact UK growth, says leading S&P economist [Online]. Available from <<u>https://www.reuters.com</u>> [Accessed on 29 February 2018].

Rhys, A. (2010) Organizational social capital, structure and performance. **Human relations**, 63 (5), pp. 583-608.

Robert, L. P., Dennis, A. R. and Ahuja, M. K. (2008) Social Capital and Knowledge Integration in Digitally Enabled Teams. **Information Systems Research**, 19 (3), pp. 314-334.

Robertson, A. (1974) Innovation Management: Theory and Comparative Practice Illustrated by two Case Studies. **Management Decision**, 12 (6), pp. 330-368.

Rodrigo-Alarcón, J., García- Villaverde, P. M., Ortega-Ruiz, M. J. and Parra-Requena, G. (2018) From social capital to entrepreneurial orientation: The mediating role of dynamic capabilities. **European Management Journal**, 36, pp. 195 – 209.

Rogers, E. M. (1995) Diffusion of innovations (4th Ed). New York: The Free Press.

Rose, T. A (2014) Five eyes on the fence: protecting the five core capitals of **your business**. New York: Business Expert Press.

Rosen. M. (1991) Coming to Terms with the Field: Understanding and Doing Organizational Ethnography. **Journal of Management Studies**, 28 (1), p. 1-24.

Roos, G. and Roos, J. (1997) Measuring your company's intellectual performance. **Long Range Planning**, 30 (3), pp. 413-426.

Rowe, L. A. and Boise, W. B. (1974) Organizational Innovation: Current Research and Evolving Concepts. **Public Administration Review**, 34 (3), pp. 284-293.

Rowley, T., Behrens, D. and Krackhardt, D. (2000) Redundant governance structures: An analysis of structural and relational embeddedness in the steel and semiconductor industries. **Strategic Management Journal**, 21 (3), pp. 369-386.

Roxas, H. B. and Chadee, D. (2011) A Resource-Based View of Small Export Firms' Social Capital in a Southeast Asian Country. **Asian Academy of Management Journal**, 16 (2), pp. 1 – 28.

Rundquist, J. (2012) The Ability to Integrate Different Types of Knowledge and its Effect on innovation Performance. **International Journal of Innovation Management**, 16 (2), pp. 1-32.

Ryan, D. (2014) **Understanding Digital Marketing**. 3<sup>rd</sup> ed. London: Kogan Page Ltd.

Salancik, G. R. (1995) Wanted: A Good Network Theory of Organization. **Administrative Science Quarterly**, 40, pp. 345-349.

Saldaña, J. (2013) **The coding manual for qualitative researchers.** 2<sup>nd</sup> ed. London: Sage.

Salkind, N. (2010) **Encyclopedia of research design**. Thousand Oaks, CA: Sage Publications Inc.

Sanchez-Famoso, V., Maseda, A. and Iturralde, T. (2014) The role of internal social capital in organisational innovation. An empirical study of family firms. **European Management Journal**, 32, pp. 950-962.

Saris, W. and Gallhofer, I. N. (2007) **Design, evaluation, and analysis of questionnaires for survey research**. Hoboken, USA: Wiley-Interscience Publication.

Saunders, M., Lewis, P. and Thornhill, A. (2000) **Research Methods for Business Students**. 2nd ed. Harlow: Prentice Hall.

Saunders, M. and Lewis, P. (2012) **Doing research in business & management: An essential Guide to Planning Your Project**. Harlow: Financial Times Prentice Hall.

Saunders, M., Lewis, P. and Thornhill, A. (2015) **Research methods for business students**. 7<sup>th</sup> ed. New York: Pearson Education.

Saviotti, P. P. and Metcalfe, J. S. (1984) A theoretical approach to the construction of technological output indicators. **Research Policy**, 13 (3), pp. 141-151.

Scharmer, C. O. (2001) Self-transcending knowledge: sensing and organizing around emerging opportunities. **Journal of Knowledge Management**, 5 (2), p. 137-151.

Schilling, M. A. and Phelps, C. C. (2007) Interfirm Collaboration Networks: The Impact of Large-Scale Network Structure on Firm Innovation. **Management Science**, 53 (7), pp. 1113-1126.

Schroeder, R. G., Van de Ven, A. H., Scudder, G. D. and Polley, D. (eds.) (2000) **The Development of Innovation Ideas**. New York: Oxford University Press.

Schumpeter, J. (1939) Business Cycles: A Theoretical, Historical, and Statistical Analysis of the Capitalist Process. New York: McGraw-Hill.

Schweisfurth, T. G. and Herstatt, C. (2016) How internal users contribute to corporate product innovation: the case of embedded users. **R&D Management**, 46 (1), pp. 107-126.

Seidler-de Alwis, R. and Hartmann, E. (2008) The use of tacit knowledge within innovative companies: knowledge management in innovative enterprises. **Journal of Knowledge Management**, 12 (1), pp. 133-147.

Seppänen, R., Blomqvist, K. and Sundqvist, S. (2007) Measuring inter-organizational trust – a critical review of the empirical research in 1990-2003. **Industrial Marketing Management**, 36, pp. 249-265.

Shaw, E. (1997) The impact which social networks have on the development of small professional service firms. Unpublished PhD thesis, University of Glasgow, Glasgow. In O'Donnell, A. (2004) The nature of networking in small firms, **Qualitative Market Research: An international Journal,** 7 (3), pp. 206-217.

Shaw, E. (1999) A guide to the qualitative research process: evidence from a small firm study. **Qualitative Market Research: An International Journal**, 2 (2), pp. 59-70.

Shaw, J. D., Park, T. Y. and Kim, E. (2013) A Resource-Based Perspective on Human Capital Losses, HRM Investments, and Organizational Performance. **Strategic Management Journal**, 34, pp. 572 – 589.

Silverman, D. (2001) Interpreting Qualitative Data: Methods for Analysing Talk, **Text, and Interaction**. 2<sup>nd</sup> ed. London: Sage Publications Ltd.

Silverman, D. (2005) **Doing Qualitative Research**. 2<sup>nd</sup> ed. London: Sage Publications.

Silversides, G. (2001) Networking and identity: the role of networking in the public image of professional service firms. **Journal of Small Business and Enterprise** 

Development, 8 (2), pp. 174-184.

Singh, B. and Rao, M. K. (2016) Effect of intellectual capital on dynamic capabilities. **Journal of Organzational Change Management**, 29 (2), pp. 129 – 149.

Sirmon, D. G., Hitt, M. A. and Ireland, R. D. (2007) Managing firm resources in dynamic environments to create value: looking inside the black box. **Academy Management Review**, 32, pp. 273 – 292.

Smedlund, A. (2008a) Identification and management of high-potential professional services. **Management Decision**, 46 (6), pp. 864-879.

Smedlund, A. (2008b) The knowledge system of a firm: social capital for explicit, tacit and potential knowledge. **Journal of Knowledge Management,** 12 (1), pp. 63-77.

Smith, J. A. (1996) Evolving issues for qualitative psychology. In Richardson, J. T. E. (ed.) Handbook of qualitative research methods for psychology and the social sciences (pp. 189-201). Leicester: BPS Books. In Braun, V. and Clarke, V. (2013) **Successful Qualitative Research: a practical guide for beginners**. London: Sage Publications Ltd.

Smith, A. (2001) The role of tacit and explicit knowledge in the workplace. **Journal of Management**, 5 (4), pp. 311-321.

Smith, K. G., Collins, C. J., and Clark, K. D. (2005) Existing knowledge, knowledge creation capability, and the rate of new product introduction in high-technology firms. **Academy of Management Journal**, 48 (2), pp. 346-357.

Snowden, D. (2002) Complex acts of knowing: paradox and descriptive selfawareness. **Journal of Knowledge Management**, 6 (2) pp. 100-111.

Snyder, H., Witell, L., Gustafsson, A., Fombelle, P. and Kristensson, P. (2016) Identifying categories of service innovation: A review and synthesis of literature. **Journal of Business Research**, 69, pp. 2401-2408.

SoDA Report (2016), Digital Marketing Outlook – 2016, Vol 1 [Online]. SoDA the Digital Society. Available from <<u>http://www.thesodareport.com</u>> [Accessed 18 January 2016].

SoDA and Forrester Report (2017), Global Digital Outlook – 2017-2018, May [Online]. SoDA the Digital Society. Available from <<u>http://thesodareport.com/files/2017-18-global-digital-outlook.pdf</u>>[Accessed 29 October 2017].

Sommerfeld, E. J. (2013) Networks of social capital: Extending a public relations model of civil society in Peru. **Public Relations Review**, 39, pp. 1-12.

Soo, C., Tian, A. W., Teo, S. T. T. and Cordery, J. (2017) Intellectual Capital – Enhancing HR, Absorptive Capacity, and Innovation. **Human Resource Management**, 56 (3), pp. 431-454. Spender, J. C. (1994) Knowing, managing and learning: A dynamic managerial epistemology. **Management Learning**, 25 (3), pp. 387-412.

Spender, J. C. and Grant, R. M. (1996) Making knowledge the basis of a dynamic theory of the firm. **Strategic Management Journal**, 17 (2), pp. 45-62.

Stake, R. E. (1995) **The Art of Case Study Research**. London: Sage Publications Ltd.

Stam, W., Arzlanian, S. and Elfring. T. (2014) Social capital of entrepreneurs and small firm performance: A meta-analysis of contextual and methodological moderators. **Journal of Business Venturing**, 29, pp. 152-173.

Stewart, T. A. (1999) Intellectual Capital: The New Wealth of Organizations. 3<sup>rd</sup> ed. London: Nicholas Brealely Ltd.

Strauss, A. and Corbin, J. (1990) Basics of Qualitative Research: Grounded Theory Procedures and Techniques, Thousand Oaks, CA: Sage. In Bryman, A. and Bell. E. (2011) **Business Research Methods**. 3<sup>rd</sup> ed. Oxford: Oxford University Press.

Stringer, E. T. (2007) Action Research. 3<sup>rd</sup> ed. London: Sage Publications Ltd.

Subramaniam, M. and Youndt, M. A. (2005) The influence of intellectual capital on the types of innovative capabilities. **Academy of Management Journal**, 48 (3), pp. 450-463.

Sundbo, J. (1997) Management of innovation in services. **The Service Industries Journal**, 17 (3), pp. 432-455.

Sundbo, J., Orfila-Sintes, F. and Sørensen, F. (2007) The innovative behaviour of tourism firms - Comparative studies of Denmark and Spain. **Research Policy**, 36, pp. 88-106.

Sundbo, J. (2010) The Toilsome path of service innovation: the effects of the law of low human multi-tasking capability. In Gallouj, F. and Djellal, F. (eds.) (2010) **The Handbook of Innovation and Services: A Multi-disciplinary Perspective.** Cheltenham, Elgar Publishing Ltd, pp. 27-48.

Sydler, R., Haefliger, S. and Pruksa, R. (2014) Measuring intellectual capital with financial figures: Can we predict firm profitability? **European Management Journal**, 32, pp. 244-259.

Syson, F. and Perks, H. (2004) New service development: A network perspective. **Journal of Services Marketing**, 18 (4), pp. 255-266.

Tabatabaei Nasab, S. M., Farhangnejad, M. A. and Naysary, B. (2013) Casting a Resource-Based View on Intangible Assets and Export Behaviour. **Business, Management and Education**, 11 (2), pp. 315 – 332.

Tech Nation (2015) **Powering the digital economy – 2015** [Online]. Tech City UK. Available from <<u>http://www.techcityUK.com</u>> [Accessed 18 January 2016].

Tech Nation (2017) Tech Nation Tech City UK. At the forefront of global digital innovation. Key Findings - Annual Report 2017 [Online]. Available from <<u>https://technation.techcityuk.com</u>> [Accessed on 29 February 2018].

The Guardian (2018) Tuition fees: key questions about the government review (February 2018). Available from <<u>https://www.theguardian.com/></u> [Accessed on 29 February 2018].

Thomas, D. R. (2006) A General Inductive Approach for Analyzing Qualitative Evaluation Data. **American Journal of Evaluation**, 27 (2), pp. 237-246.

Tidd, J. (2001) Innovation management in context: Environment, organization and performance. **International Journal of Management Reviews**, 3 (3), pp. 169-183.

Toivonen, M. (2010) Different types of innovation processes in services and their organisational implications. In Gallouj, F. and Djellal, F. (eds.) (2010) **The Handbook of Innovation and Services: A Multi-disciplinary Perspective.** Cheltenham, Elgar Publishing Ltd, pp. 27-48.

Truong, Y. and Simmons, G. (2010) Perceived intrusiveness in digital advertising: strategic marketing implications. **Journal of Strategic Marketing**, 18 (3), pp. 239-256.

Tsai, W. and Ghoshal, S. (1998) Social Capital and Value Creation: The Role of Intrafirm Networks. **Academy of Management Journal**, 41 (4), pp. 464-476.

Utterback, J. M. (1971) The Process of Technological Innovation Within the Firm. **The Academy of Management Journal**, 14 (1), pp. 75-88.

Utterback, J. M. and Abernathy, W. J. (1975) A Dynamic Model of Process and Product Innovation. **The International Journal of Management Science**, 3 (6), pp. 639-656.

Unesco (2018) UNESCO-WHEUR World Higher Education University Rankings (2018). IAU International Alliance of Universities Division [Online]. Available from <<u>http://www.unesco.vg/iau/unesco-wheur</u>/> [Accessed on 29 February 2018].

Uzzi, B. and Gillespie, J. J. (2002) Knowledge spillover in corporate financing networks: Embeddedness and the firm's debt performance. **Strategic Management Journal**, 23 (7), pp. 595-618.

Uzzi, B. and Lancaster, R. (2003) Relational Embeddedness and Learning: The Case of Bank Loan Managers and Their Clients. **Management Science**, 49 (4), pp. 383-399.

Vad Baunsgaard, V. and Clegg, S. R. (2015) Innovation: A Critical Assessment of the  $_{403}$ 

Concept and Scope of Literature. In Agarwal, R., Selen, W., Roos, G. and Green, R. (eds.) (2014) **The Handbook of Service Innovation**. London: Springer, pp. 5-25.

Van de Ven, A. (2007) **Engaged Scholarship: A guide for organizational and social research**. Oxford: Oxford University Press.

Van de Ven, A. H., Polley, D. E., Garud, R. and Venkataraman, S. (1999) **The Innovation Journey**. New York: Oxford University Press.

Van de Ven, A. H., Polley, D. E., Garud, R. and Venkataraman, S. (2008) **The Innovation Journey**. New York: Oxford University Press.

Van Hemert, P., Nijkamp, P. and Masurel, E. (2013) From innovation to commercialization through networks and agglomerations: analysis of sources of innovation, innovation capabilities and performance of Dutch SMEs. **The Annals of Regional Science**, 50, pp. 425-452.

Van Looy, A., Carmona, J., Engels, G. and Kumar, A. (2017) **A quantitative study on the link between business process management and digital innovation**. Business Process management Forum, (2017) Springer.

Vargo, S. L. and Lusch, R. F. (2004) Evolving to a New Dominant Logic for Marketing. **Journal of Marketing**, 68, pp. 1-17.

Vermeulen, P. A. M. (2005) Uncovering Barriers to Complex Incremental Product Innovation in Small and Medium-Sized Financial Service Firms. **Journal of Small Business Management**, 43 (4), pp. 432-452.

Villar, C. Alegre, J. and Pla-Barber. J. (2014) Exploring the role of knowledge management practices on exports: A dynamic capabilities view. **International Business Review**, 23, pp. 38 – 44.

Villena, V. H., Revilla. E. and Choi, T. Y. (2011) The dark side of buyer-supplier relationships: A social capital perspective. **Journal of Operations Management**, 29, pp. 561-576.

Vom Brocke, J. and Mendling, J. (eds.) (2018) **Business Process Management Cases: Digital innovation and Business Transformation in Practice**. Cham, Switzerland: Springer International Publishing.

Walter, J., Lechner, C. and Kellermanns, F. W. (2007) Knowledge transfer between and within alliance partners: Private versus collective benefits of social capital. **Journal of Business Research**, 60, pp. 698-710.

Wagner, R. K. and Sternberg, R. J. (1987) Tacit knowledge in managerial success. **Journal of Business and Psychology**, 1 (4), pp. 303-312.

Webb, K. L. and Hogan, J. E. (2002) Hybrid channel conflict : Causes and effects on channel performance. **The journal of Business and Industrial Marketing**, 17 (5), pp. 338 - 356.

Wheatley, M. J. (2006) **Leadership and the New Science**. San Francisco: Berrett-Koechler Publishers Inc.

Wilson, A. (2006) **Marketing Research: An Integrated Approach**. 2<sup>nd</sup> ed. Harlow: Prentice Hall.

Wijayanti, R., Berliana, N. G., Nadhiroh, I. M., Aminullah, E., Kusnandar, T. Fizzanty T., Handayani, T., Rahmaida, N., Laili, N., Kusbiantono, N. and Handoko, L. T. (2012) **The Correlation between Structural Capital and Innovation in Indonesian Manufacturing Industry**. International Conference on Innovation, Management and Technology Research. Malacca, Malaysia.

Witell, L., Snyder, H., Gustafsson, A., Fombelle, P. and Kristensson, P. (2016) Defining service innovation: A review and synthesis. **Journal of Business Research**, 69, pp. 2863-2872.

Wirtz, J., Tambyah, S. K. and Mattila, A. S. (2010) Organizational learning from customer feedback received by service employees. **Journal of Service Management**, 21 (3), pp. 363-387.

Wolfe, A. (1994) Organizational Innovation: Review, Critique and Suggested Research Directions. **Journal of Management Studies**, 31 (3), pp. 405-431.

World Bank Group (2017) Science and Technology. Patents applications [Online]. Available from <<u>http://www.worldbank.org/></u> [Accessed on 29 February 2018].

Yin, R. K. (1994) **Case study research: Design and methods**. Beverly Hills, CA: Sage Publications.

Yin, R. K. (2014) **Case Study Research: Design and Methods**. 5th ed. London: Sage Publication Ltd.

Zangoueinezhad, A. and Moshabaki, A. (2009) The role of structural capital on competitive intelligence. **Industrial Management and Data Systems**, 109 (2), pp. 262-280.