

**Exploring how Decision-Making Processes shape the
TQM Implementation in Healthcare: Comparative
Case Studies in Iraqi Hospitals**

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TABLE OF CONTENTS

LIST OF TABLES	IX
LIST OF FIGURES	IX
LIST OF ABBREVIATIONS	X
ACKNOWLEDGEMENTS	1
ABSTRACT.....	2
CHAPTER 1 INTRODUCTION.....	4
1.0 CHAPTER INTRODUCTION.....	4
1.1 BACKGROUND	4
1.2 REASONS FOR RESEARCHING IN THIS AREA	6
1.2.1 The Government Policy	6
1.2.2 Personal interest.....	7
1.2.3 The dearth of study in this area.....	7
1.3 RESEARCH OUTLINE.....	8
1.3.1 Research Aim	8
1.3.2 Research Objectives (ROs).....	9
1.3.3 Research Questions (RQs)	9
1.3.4 Research Significance & Contribution	9
1.4 STRUCTURE OF THE THESIS.....	11
1.4.1 Chapter One: Introduction.....	12
1.4.2 Chapter Two: Literature Review	12
1.4.3 Chapter Three: Theoretical Framework.....	12
1.4.4 Chapter Four: Research Methodology.....	12
1.4.5 Chapter Five: Data Analysis and Research Findings.....	12
1.4.6 Chapter Six: Discussion.....	13
1.4.7 Chapter Seven: Conclusion and Recommendations	13
1.5 CHAPTER SUMMARY	13
CHAPTER 2 LITERATURE REVIEW	15
2.0 CHAPTER INTRODUCTION.....	15
2.1 QUALITY- AN EXPLANATION	15
2.2 INTRODUCTION OF TQM IMPLEMENTATION	18
2.3 TQM IMPLEMENTATION IN THE HEALTHCARE SECTOR.....	20
2.4 WHAT IS CRITICAL SUCCESS FACTOR (CSF)	22
2.5 THE CRITICAL SUCCESS FACTORS OF TQM IMPLEMENTATION.....	23

2.5.1 Senior Management Commitment (SMC)	26
2.5.2 Staff Involvement and Teamwork (SI)	28
2.5.3 Training (T)	30
2.5.4 Employee Empowerment (EE)	31
2.5.5 Continuous Improvement (CI)	33
2.5.6 Communication (C)	34
2.6 INTRODUCTION TO DECISION-MAKING	35
2.6.1 Centralisation of decision-making	38
2.6.2 Decentralisation of decision-making	39
2.6.3 Comparison between Centralisation vs. Decentralisation of decision-making	40
2.6.3.1 Advantages of Centralisation	40
2.6.3.2 Advantages of Decentralisation	41
2.6.3.3 Disadvantages of Centralisation	41
2.6.3.4 Disadvantages of Decentralisation	41
2.7 CHAPTER SUMMARY	43
CHAPTER 3 THEORETICAL FRAMEWORK	45
3.0 CHAPTER INTRODUCTION	45
3.1 DECISION-MAKING THEORIES	45
3.1.1 Subjective Expected Utility (SEU) Theory	45
3.1.2 Prospect Theory	46
3.1.3 Bayesianism Theory	47
3.1.4 Satisficing Theory	47
3.1.4.1 Candidate Decision-making Models	48
3.2 THE RATIONALE FOR CHOOSING THE DECISION-MAKING PROCESS	51
3.2.1 Identify the decision to be made (ID)	52
3.2.2 Gathering Information (GI)	52
3.2.3 Identify the alternatives (I Alt)	53
3.2.4 Choosing from the alternatives (C Alt)	53
3.2.5 Taking Action (TA)	53
3.2.6 Monitor and Evaluate (M&E)	54
3.3 TQM IMPLEMENTATION FACTORS AND DECISION-MAKING PROCESS	54
3.3.1 Senior Management Commitment (SMC) and Decision-making process	55
3.3.2 Staff Involvement and Decision-making process	56
3.3.3 Training and Decision-making process	58
3.3.4 Employee Empowerment and Decision-making process	59
3.3.5 Continuous Improvement (CI) and Decision-making process	60

3.3.6 Communication and Decision-making process	61
3.4 ISSUES FROM THE LITERATURE REVIEW	62
3.5 RATIONALE FOR THE STRUCTURE OF THE THEORETICAL FRAMEWORK	62
3.6 CHAPTER SUMMARY	66
CHAPTER 4 RESEARCH METHODOLOGY	68
4.0 CHAPTER INTRODUCTION	68
4.1 PHILOSOPHICAL PARADIGMS OF THE RESEARCH	69
4.1.1 Positivist Paradigm	70
4.1.2 Interpretive Paradigm	71
4.2 RESEARCH APPROACHES	72
4.2.1 Quantitative Research	72
4.2.2 Qualitative Research	73
4.3 CHOICE OF RESEARCH STRATEGY	74
4.4 JUSTIFICATIONS FOR CHOICE OF CASE STUDIES	76
4.5 PREPARATION FOR DATA COLLECTION	77
4.5.1 Protocol Development	77
4.5.2 Principles of Evidence and Data Collection	78
4.5.2.1 Documentation	78
4.5.2.2 Archival Records	79
4.5.2.3 Interviews	79
4.5.2.3.1 Justification for Choosing Semi-Structured Interviews	80
4.6 TRIANGULATION: RATIONALE FOR USING MULTIPLE SOURCES OF EVIDENCE	81
4.7 STRUCTURE OF THE INTERVIEW PROTOCOL	82
4.7.1 Generating and Developing the Interview Questions	82
4.7.2 Preparing the Interview Protocol	82
4.7.3 Selection of Interviewees	83
4.7.4 The need for longitudinal study	83
4.7.5 Conducting the Pilot Study	85
4.7.6 Reliability of the Data	85
4.7.7 Translating the Interview Questions	86
4.8 ETHICAL CONSIDERATIONS	87
4.9 DATA ANALYSIS	87
4.10 CHAPTER SUMMARY	89
CHAPTER 5 RESEARCH FINDINGS	91
5.0 CHAPTER INTRODUCTION	91

5.1 CASE STUDY 'A' THE CENTRALISED CASE (PUBLIC HOSPITAL).....	91
5.1.1 Decision-making steps	92
5.1.1.1 Identifying the decision to be made	92
5.1.1.2 Gathering information.....	92
5.1.1.3 Identifying the alternatives.....	93
5.1.1.4 Choosing from the alternatives	93
5.1.1.5 Taking Action	93
5.1.1.6 Monitoring and Evaluating	94
5.1.2 TQM Implementation	95
5.1.2.1 Senior Management Commitment (SMC)	95
5.1.2.2 Staff Involvement (SI)	96
5.1.2.3 Training.....	97
5.1.2.4 Employee Empowerment (EE)	97
5.1.2.5 Continual Improvement (CI).....	98
5.1.2.6 Communication.....	98
5.1.3 General Questions.....	99
5.2 CASE STUDY 'B' THE DECENTRALISED CASE (PRIVATE HOSPITAL)	100
5.2.1 Decision-making.....	100
5.2.1.1 Identifying the decision to be made	100
5.2.1.2 Gathering Information.....	100
5.2.1.3 Identifying the Alternatives	101
5.2.1.4 Choosing from the alternatives	101
5.2.1.5 Taking Action	102
5.2.1.6 Monitoring and Evaluating	102
5.2.2 TQM Implementation	103
5.2.2.1 Senior Management Commitment (SMC)	103
5.2.2.2 Staff Involvement (SI)	104
5.2.2.3 Training.....	104
5.2.2.4 Employee Empowerment (EE)	105
5.2.2.5 Continual Improvement (CI).....	105
5.2.2.6 Communication.....	106
5.2.3 General Questions	106
5.3 CHAPTER SUMMARY	107
CHAPTER 6 DISCUSSION.....	109
6.0 CHAPTER INTRODUCTION.....	109
6.1 DISCUSSION OF CASE STUDIES.....	109

6.1.1 Senior Management Commitment (SMC) and the decision-making process	109
6.1.1.1 SMC and identifying the decision to be made	110
6.1.1.2 SMC and Gathering Information	111
6.1.1.3 SMC and Taking Action	111
6.1.1.4 SMC and Monitoring & Evaluating.....	112
6.1.1.5 Section Summary	112
6.1.2 Staff Involvement (SI) and the decision-making process	113
6.1.2.1 SI and identifying the decision to be made	113
6.1.2.2 SI and Gathering Information	114
6.1.2.3 SI and Taking action	115
6.1.2.4 SI and Monitoring and Evaluating	115
6.1.2.5 Section summary	115
6.1.3 Training and the decision-making process	116
6.1.3.1 Training and identifying the decision to be made	117
6.1.3.2 Training and Gathering Information	117
6.1.3.3 Training and Taking Action	118
6.1.3.4 Training and Monitoring and Evaluating	118
6.1.3.5 Section Summary	119
6.1.4 Employee Empowerment and the decision-making process	119
6.1.4.1 EE and identifying the decision to be made.....	120
6.1.4.2 EE and Gathering Information	120
6.1.4.3 EE and Taking Action.....	121
6.1.4.4 EE and Monitoring and Evaluating.....	121
6.1.4.5 Section summary	122
6.1.5 Continuous Improvement (CI) and the decision-making process.....	123
6.1.5.1 CI and identifying the decision to be made.....	123
6.1.5.2 CI and Gathering Information.....	123
6.1.5.3 CI and Taking Action.....	123
6.1.5.4 CI and Monitoring and Evaluating.....	124
6.1.5.5 Section Summary	124
6.1.6 Communication and the decision-making process	125
6.1.6.1 Communication and identifying the decision to be made	125
6.1.6.2 Communication and Gathering Information	126
6.1.6.3 Communication and Taking Action	126
6.1.6.4 Communication and Monitoring and Evaluating	126
6.1.6.5 Section Summary	127
6.2 DISCUSSION OF THE THEORETICAL FRAMEWORK.....	127

6.2.1 The Similarities.....	128
6.2.1.1 The similarities in SMC	128
6.2.1.2 The similarities in Identification and choice alternatives.....	129
6.2.1.3 The similarities in Staff Involvement.....	129
6.2.1.4 The similarities in Training.....	129
6.2.1.5 The similarities in Employee Empowerment	130
6.2.1.6 The similarities in Continual Improvement	130
6.2.1.7 The similarities in Communication	130
6.2.2 The Differences.....	131
6.2.2.1 Differences in SMC	131
6.2.2.2 Differences in Staff Involvement (SI).....	131
6.2.2.3 Differences in Training	132
6.2.2.4 Differences in Employee Empowerment (EE).....	132
6.2.2.5 Differences in Continual Improvement (CI)	133
6.2.2.6 Differences in Communication	133
6.2.3 Explanation of the Theoretical Framework.....	134
6.3 CRITICAL DISCUSSION ON THE CONDUCT OF THE RESEARCH AND RESEARCH METHODOLOGY	136
6.4 LIMITATIONS OF THE RESEARCH.....	137
6.5 CHAPTER SUMMARY.....	139
CHAPTER 7 CONCLUSIONS AND RECOMMENDATIONS	141
7.0 CHAPTER INTRODUCTION.....	141
7.1 CONCLUSIONS	141
7.1.1 Meeting the aim and objectives, and answering the research questions.....	141
7.2 RESEARCH CONTRIBUTIONS.....	143
7.2.1 Theoretical Contributions	143
7.2.2 Practical Contributions.....	145
7.3 RECOMMENDATIONS FOR FURTHER RELATED RESEARCH.....	147
REFERENCES.....	149
APPENDICES.....	167
APPENDIX 1: THE CASE STUDY DATA PROTECTION PROTOCOL	167
APPENDIX 2: INTERVIEW QUESTIONS (FIRST INTERVIEW).....	168
APPENDIX 3: INTERVIEW QUESTIONS (SECOND INTERVIEW)	173
APPENDIX 4: SUMMARY OF FIRST INTERVIEWS OF CASE STUDY (A).....	177
APPENDIX 5: SUMMARY OF SECOND INTERVIEWS OF CASE STUDY (A).....	199

APPENDIX 6: SUMMARY OF FIRST INTERVIEWS OF CASE STUDY (B)	212
APPENDIX 7: SUMMARY OF SECOND INTERVIEWS OF CASE STUDY (B)	240
APPENDIX 8: TQM FACTORS	261

List of Tables

TABLE 2.1 TQM GURUS	18
TABLE 2.2 CSFs OF TQM IMPLEMENTATION.....	24
TABLE 2.3 ADVANTAGES AND DISADVANTAGES OF CENTRALISATION.....	42
TABLE 2.4 ADVANTAGES AND DISADVANTAGES OF DECENTRALISATION	42
TABLE 4.1 A COMPARISON BETWEEN POSITIVISM AND INTERPRETIVISM	72
TABLE 4.2 RELEVANT SITUATIONS FOR DIFFERENT RESEARCH STRATEGIES	74
TABLE 4.3 INTERVIEWEES DETAILS	84
TABLE 6.1 A COMPARISON OF THE SMC IN THE TWO CASES	112
TABLE 6.2 A COMPARISON OF SI IN THE TWO CASES.....	116
TABLE 6.3 A COMPARISON OF THE TRAINING IN THE TWO CASES.....	119
TABLE 6.4 A COMPARISON OF EE IN THE TWO CASES	122
TABLE 6.5 A COMPARISON OF CI IN THE TWO CASES	124
TABLE 6.6 A COMPARISON OF THE COMMUNICATION IN THE TWO CASES	127

List of Figures

FIGURE 1.1 STRUCTURE OF THE THESIS	11
FIGURE 3.1 DECISION- MAKING PROCESS (SOURCE: ADAPTED FROM SIMON, 1960)	49
FIGURE 3.2 THE GARBAGE CAN MODEL (SOURCE: ADAPTED FROM MARCH ET AL., 1972).....	50
FIGURE 3.3 SLADE'S DECISION-MAKING MODEL (SOURCE: ADAPTED FROM SIMON, 1992).....	50
FIGURE 3.4 THE DECISION-MAKING PROCESS.....	51
FIGURE 3.5 THE INITIAL RESEARCH FRAMEWORK OF HOW THE DECISION-MAKING SHAPE THE TQM IMPLEMENTATION FACTORS.....	65
FIGURE 4.1 OVERVIEW OF THE USED RESEARCH METHODOLOGY	69
FIGURE 4.2 CONVERGENCE OF MULTIPLE SOURCES OF EVIDENCE (ADAPTED FROM YIN 2014, P.121)	81
FIGURE 4.3 THE PROCESS OF TRANSLATION OF THE INTERVIEW QUESTIONS AND RESPONSES	86
FIGURE 6.1 THE INFLUENCE OF DECISION-MAKING PROCESS ON SMC	113
FIGURE 6.2 THE INFLUENCE OF DECISION-MAKING PROCESS ON SI.....	116
FIGURE 6.3 THE INFLUENCE OF THE DECISION-MAKING PROCESS ON TRAINING	119
FIGURE 6.4 THE INFLUENCE OF THE DECISION-MAKING PROCESS ON EE.....	122
FIGURE 6.5 THE INFLUENCE OF THE DECISION-MAKING PROCESS ON CI.....	125
FIGURE 6.6 THE INFLUENCE OF THE DECISION-MAKING PROCESS ON COMMUNICATION	127
FIGURE 6.7 THEORETICAL FRAMEWORK OF HOW DECISION-MAKING INFLUENCE THE CSFs OF TQM IMPLEMENTATION (THE TQM CLOCK)	135

List of Abbreviations

WHO	world health organisation
GDP	Gross Domestic Product
UNDP	United Nations Development Programme
USAID	US Agency for International Development
GD	Governmental Department
ID	Identify the decision to be made
GI	Gather Information
I Alt	Identify the alternatives
C Alt	Choose from the alternatives
TA	Takin Action
M&E	Monitor and Evaluate
CSFs	Critical Success Factors
SMC	Senior Management Commitment
SM	Senior Management
SI	Staff Involvement
T	Training
EE	Employee Empowerment
CI	Continuous Improvement
C	Communication
DMP	Decision-making Process
SEU	Subjective Expected Utility

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Abstract

This research aimed to explore how and why *centralised* and *decentralised* decision-making influenced *TQM implementation* in Iraqi hospitals. It is an exploratory study, which focuses on explaining how and why decision-making processes influence TQM implementation. Satisficing theory found to fit as a theoretical lens that offers assumption about the decision-making process. This theory is known as the theory of bounded rationality, as Simon put bounded by “cognitive limits”, which assumes that people make decisions under insufficient information, in addition to unable to process it properly. This assumption has helped the researcher to build the theoretical framework, to make a comparison between the public and the private hospitals. The critical success factors of TQM implementation, which have been addressed in this study; senior management commitment, staff involvement, training, employee empowerment, continues improvement and communication.

This study has been conducted by adopting a case study strategy and a qualitative approach. The data was gathered by using semi-structured interviews as the main data collection instrument within two hospitals in Iraq. Additionally, a number of other data collection instruments were used in order to achieve triangulation and to fully understand the decision-making processes influence on TQM implementation in the two cases. In total, 24 participants were interviewed and the research reveals that not all of the decision-making processes influence the whole of *six critical success factors* (CSFs) of TQM implementation.

The outcome of this study has been divided into theoretical contributions and practical one. *Theoretical contributions* revealed to there is not enough attention to the interaction between the decision-making process and TQM implementation. In addition, the study referred to after war national strategy as the main reason for following the centralised decision-making approach in healthcare. Furthermore, one of the important *contributions* of this research is that it proposes an updated theoretical framework that could be used as a tool to understand how the decision-making influence TQM implementation. *Practical contributions* help as a guideline for decision-makers including; policymakers, TQM implementation professionals, and Hospital board of directors to maintain and improve the TQM implementation.

Chapter one

Research Introduction

Chapter 1 Introduction

1.0 Chapter Introduction

This chapter presents the study's background. The reasons for the research being explained, and the research aim, research objectives and research questions being described in this chapter. The research significance and contribution will be outlined and the structure of the thesis will be explained including brief information for each chapter.

1.1 Background

Iraq had given healthcare great importance since the 1920s when the Royal College of Medicine in the UK did training to Iraqi doctors, in addition to the training, which was done in Germany. Health indicators were improved quickly by the 1970s and Iraq's health care was one of the most advanced systems in the region (Al Hilfi *et al.*, 2013). After Saddam Hussain come to the power, funds were diverted from the health sector. The 1980-1988 Iraq-Iran war killed around half a million people from both sides. In 1991, the first Gulf war led to a deterioration again in the health system, as it destroyed health infrastructure and during decades of sanctions, the government spending on the health system was reduced.¹ The sanctions had a major effect on Iraq's health system and the health situation in Iraq. The subsequent oil-for-food programme mitigated some of the effects of the sanctions, but serious damage was done to the health system (Al Hilfi *et al.*, 2013).

After the 2003 war, the healthcare situation deteriorated considerably, as between 2003 and 2007 almost half of Iraq's doctors (around 18,000 doctors) left the country, according to Medact (a British –based global health charity) and just a few of them intended to return (Doocy *et al.*, 2010, Webster, 2011).

In 2011, according to the world health organisation (WHO), Iraq had 7.8 doctors per 10,000 people, this rate is two if not three times lower than its neighbours such as Jordan,

¹ Iraq 10 years on: War leaves lasting impact on healthcare.
<http://www.irinnews.org/feature/2013/05/02/iraq-10-years-war-leaves-lasting-impact-healthcare>.

Lebanon, Syria and even the Occupied Palestinian Territory.² The group of Médecins Sans Frontières (MSF) said that, until now, it is extremely hard to find Iraqi medical staff willing to work in certain areas because they fear for their safety (Burkle Jr and Garfield, 2013).

The Iraqi healthcare system is primarily centralised with allocations of government funding going towards the industry each year. According to the World Health Organisation (WHO), 2011 there were 1,146 primary health centres headed by mid-level workers; and 1,185 health centres, led by medical doctors. There are 229 hospitals, including 61 teaching hospitals. Government spending on healthcare has increased in recent years, according to the World Bank: In 2003, spending was at 2.7% of Gross Domestic Product (GDP), and in 2010 it had jumped to 8.4%; however, the disbursement of these funds remains in question, as there is still a lack of facilities, medication and staff to show for it.³

The World Health Organisation Representative's Office in Iraq "supports the Government and health authorities at a central and local level in strengthening health services, addressing public health issues and supporting and promoting research for health. Physicians, public health specialists, scientists, social scientists and epidemiologists provide appropriate technical assistance and collaboration upon the request or acceptance of national authorities." Other key players include the US Agency for International Development (USAID), United Nations agencies, such as the United Nations Development Programme (UNDP) and other humanitarian organisations as well as development partners (Levy and Sidel, 2013, Webster, 2011). These organisations and institutions encouraged the Iraqi government to try hard to develop different sectors in Iraq. TQM implementation to develop the Iraqi hospital's processes was a result of this encouragement.

² Iraq 10 years on: War leaves lasting impact on healthcare.
<http://www.irinnews.org/feature/2013/05/02/iraq-10-years-war-leaves-lasting-impact-healthcare>.

³ Iraqi Research Foundation for Analysis and Development (IRFAD) <http://www.irfad.org/about-irfad>

There are a few studies in the Iraqi context about TQM, as the Iraqi government encouraged different sectors to implement TQM after the war in 2003. Most of the Iraqi studies regarding TQM were in the higher education sector (Abbas, 2009, Alazawy, 2010, Alnasir, 2011, Hattab, 2009, Sulaiman, 2012). These studies normally used quantitative methods for data collection and analysis and explored just the ability of organisations to implement TQM in the Iraqi context. In this study, the author focuses on how decision-making influence TQM implementation. In addition to that, the author makes a comparison between the public and the private Iraqi hospitals using qualitative methods for data analysis and case study for data collection. This methodology helps the researcher to look at the TQM implementation in depth.

1.2 Reasons for researching in this area

1.2.1 The Government Policy

The Iraqi government started to implement TQM in 2013 in public and private hospitals. The public hospitals were working with a high level of centralisation, which means the government has the power to give them an order to implement TQM, while the private hospitals were working with decentralisation of decision-making, because of that the government just asked the private ones to implement TQM.

The prevailing trend in the Saddam era appeared to be towards greater centralisation of power and authority in Baghdad, especially within the public-sector area (Fitzsimmons, 2008, Ahmad, 2002). Furthermore, in the Saddam era, decision-making was certainly very centralised in Iraq; even the private sector did not have real authority to do what they wanted to do without going back to Baghdad to get approval from them (Barakat, 2005). This centralist approach became strongly instilled in the organisational processes. It has been a way of life and it is going to be hard to change managerial procedures. There were a number of factors that worked against this change taking place after the war in 2003. Factors such as; instant transformation, violent conflict and sudden regime change (Barakat, 2008).

TQM has become the universally accepted process for improving organisational performance and competitiveness, and Iraq can draw on the success of many Japanese and Western organisations, which have built their competitiveness based on its principles

(Chakravarty et al., 2001, Chang and Chu, 2003, Claus, 1991). At the same time, the Iraqi situation seems to be far to reach the optimisation in the decision-making especially with lack of rich knowledge and enough resources, as Iraq just came out from the 2003 war, which affected badly on the whole situation in the country. While TQM looking to reach the idealism in every single action- do it right from the first time, which means the staff have rich knowledge to implement TQM.

Thus, the Iraqi context provides the researcher with an idea to think about this study. As this study gives an opportunity to look at this meeting of decision-making theory with TQM implementation theory.

1.2.2 Personal Interest

The researcher has a personal interest in this topic, as he is an Iraqi citizen and has been a full-time lecturer at the Faculty of Business Administration at the University of Basra since 2005. In addition, the researcher previously did some research in Basra public hospitals, and he is familiar with many of the hospital's staff and that has helped the researcher to minimise the routine procedures. Moreover, the healthcare industry is such an important part, as it is related to people's lives directly. In addition, this type of research is new in Iraq, and TQM implementation is a worthwhile issue, which can help the hospitals' performance to be improved in the future.

1.2.3 The dearth of study in this area

Previous studies have comprised public and private sectors regarding TQM implementation and have made a comparison between two different countries or more within the same sector or different sectors, but have not given enough attention to the interaction of decision-making with TQM implementation, with only a few exceptions.

In the Arabic world, organisations, to date, are mostly interested in Quality Assurance Systems; therefore, the adoption of TQM has been minimal. However, Iraqi healthcare has begun implementing the process of TQM. Although many highly competitive and world-class organisations have implemented TQM strategies, as means of continually seeking better performance, many studies have revealed inconsistency and contradictory outcomes concerning the relationship between the TQM implementation and the organisation itself.

Ah-Teck and Starr (2014) focused on school leaders' use of data and evidence in making decisions for school improvement by using TQM that is by how the ethical commitment of the leadership could enhance the teaching and learning environment. The study reports on qualitative aspects within mixed methods research with data collected by semi-structured interviews. Akdere (2011) examined decision-making in organisations to understand how decision-making processes are used by the participants to achieve accurate and effective decisions as a part of quality management. The study used process, such as; consultative decision-making, brainstorming and voting decision-making, and in order to investigate the research question, the survey instrument was used. Whereas, Sabur (2015) studied how TQM can improve organisational productivity by using scientific knowledge in decision-making such as developing strategic management techniques; however, the researcher in this study focused on how centralised and decentralised decision-making influence TQM implementation according to the satisficing theory, and there is, to date, no study that examines the adoption of TQM implementation and how the satisficing theory influence this implementation in the healthcare system. As the satisficing theory assumed the bounded rationality in the decision-making process, which reflects the reality of the decision-making process in Iraq; however, the reality of Iraqi situation and the TQM implementation goals were not in the same level. As the Iraqi situation suffering from lack of knowledge and resources in general, especially after the war, while TQM assumed that people know what they doing and that's where do it right from the first time is come from, which considered one of the main concepts of TQM. So, how the Iraqi government implementing TQM in this environment.

1.3 Research Outline

This section explains the research aim, research objectives, and research questions.

1.3.1 Research Aim

The aim of this research is to identify how and why decision-making influences TQM implementation factors in hospitals in Iraq.

1.3.2 Research Objectives (ROs)

- RO1. To critically review and synthesise the relevant literature on TQM implementation factors and decision-making.
- RO2. To explore how centralised and decentralised decision-making influence TQM implementation factors in Iraqi hospitals.
- RO3. To understand why centralised and decentralised decision-making influence TQM implementation factors in Iraqi hospitals.
- RO4. To develop a conceptual framework that helps understand the influence of decision making approaches and processes on TQM implementation factors in Iraqi hospitals.

1.3.3 Research Questions (RQs)

This study seeks to answer these research questions:

- RQ1. What are the Critical Success Factors of TQM implementation in Healthcare?
- RQ2. How does centralised and decentralised decision-making shape TQM implementation factors in Healthcare?
- RQ3. Why does centralised and decentralised decision-making shape TQM implementation factors in Healthcare?

1.3.4 Research Significance & Contribution

First, the research focused on published work that addresses the TQM implementation. In doing so, the researcher reviewed the history of TQM implementation in the healthcare sector to point out the critical success factors (CSFs) such a process. Six CSFs (i.e. senior management commitment, staff involvement, training, employee empowerment, continuous improvement, and communication) have been considered more critical than other 27 factors found in the published work (See Appendix 8). The rationale behind the selection of these six factors is their common use in previously published TQM literature as CSFs. Applying these factors in Healthcare management pointed out the interdependency of these factors and joint influence on the TQM implementation success. Additionally, these factors found to have different interplay in public and private organisations in terms of TQM implementation success (See section 2.5, p.23).

Second, the researcher studied alternative models and theories of decision-making in order to propose a theoretical framework for decision making in TQM implementation process, which is placed in chapter three. The “*Subjective Expected Utility*”, “*Bayesianism*” and “*Prospect*” Theories have been reviewed as examples of normative theories of decision making. While the “*Satisficing Theory*” found to fit as a theoretical lens that offers a mix of descriptive and normative assumptions about the decision making process. This theory is known as the theory of bounded rationality, as Simon put bounded by “*cognitive limits*”, which assumes that people make decisions under insufficient information, in addition to unable to process it properly. This assumption has helped the researcher to build the theoretical framework, to make a comparison between the public and the private healthcare sector.

Third, it is worth noting that the data collected is considered the features of qualitative data, which are its richness, and holism, in which it comes along with the strong potential to reveal the complexity of the phenomena and offers thick description to answer the research questions. The data considered the context of public vs. private sectors. Collected the data from Iraqi hospitals, which are insecure environment, especially after the war era is one of the contributions in this study.

Lastly, this research expands the knowledge of the policymakers in the healthcare sector and stakeholders on how the decision-making influences TQM implementation, as well as, enriches the existing literature and fill the gap in particular in the Iraqi context.

1.4 Structure of the Thesis

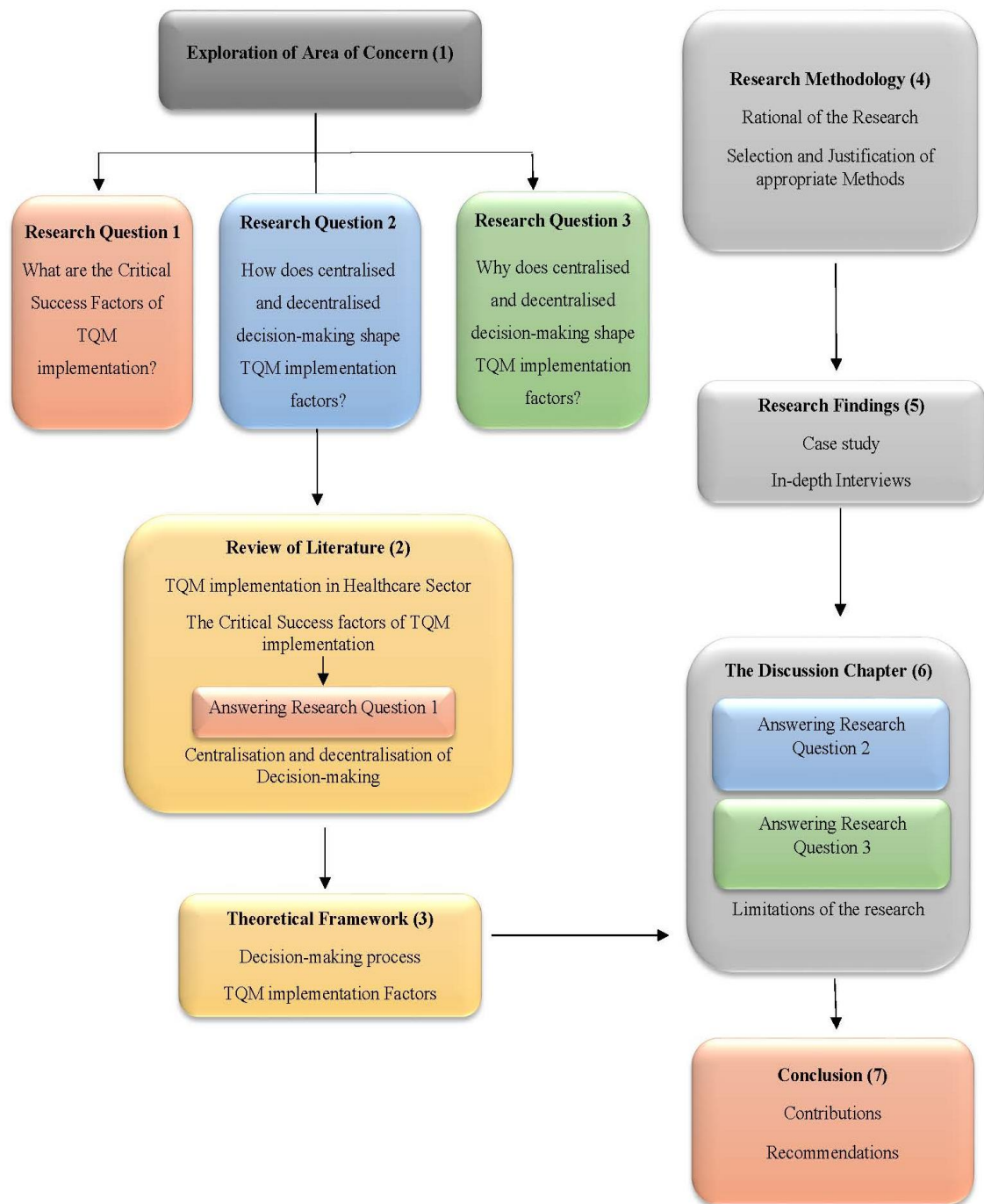


Figure 1.1 Structure of the Thesis

As shown in figure 1.1, this thesis is divided into seven chapters and here is how it structured:

1.4.1 Chapter One: Introduction

This chapter contains the study's background, the reasons for the research were explained, and the research aim, research objectives, and research questions were described. The expected contributions to the knowledge of the research were outlined.

1.4.2 Chapter Two: Literature Review

This chapter is critically reviewing the relevant studies done by the previous researchers regarding the TQM implementation and decision-making and reviewing the literature on the factors that play a role in decision-making and applied in TQM implementation to provide a framework for the field study. Firstly, the chapter starts with an introduction to TQM implementation in the healthcare sector and what are the critical success factors of TQM implementation. Then it proceeds to the centralisation and decentralisation of decision-making and what the advantages and disadvantages are for both.

1.4.3 Chapter Three: Theoretical Framework

This chapter considered the matters from the literature reviews in chapter two and put them into a theoretical framework. This theoretical framework is an attempt to show how and why the decision-making process shapes TQM implementation factors in public and private Iraqi hospitals.

1.4.4 Chapter Four: Research Methodology

This chapter describes the research methodology that the researcher used to meet the research aim and objectives, and answer the research questions. It contains sections on research paradigms, research strategy choice, research design, preparation of data collection and methods for the analysis of case study data.

1.4.5 Chapter Five: Data Analysis and Research Findings

The aim of this chapter is to present and analyse the data collected from the case study hospitals in Iraq. The author collected the data from two cases and used pattern matching to analyse the data.

1.4.6 Chapter Six: Discussion

In this chapter, the research findings from the two cases are discussed in the light of the literature and the CSFs of TQM implementation, which are listed in chapter two. This chapter is organised to discuss the original research question and interprets the findings in relation to relevant literature. This discussion highlight each of the decision-making process, the CSFs of TQM implementation and the corresponding findings in the case studies.

1.4.7 Chapter Seven: Conclusion and Recommendations

This is the last chapter of the thesis, as the conclusions will be drawn. This chapter contains revisiting the aim of this study, the objectives, and the research questions. It also contains the contributions to knowledge and practice, recommendations for further research will be made in this chapter.

1.5 Chapter Summary

This chapter has provided an introduction to the study and what the reasons to study in this area were. In addition, it stated the aim of the study, the objectives, the research questions and the expected contribution to knowledge. The structure of the thesis was explained at the end of the chapter.

Chapter Two

Literature Review

Chapter 2 Literature Review

2.0 Chapter Introduction

This chapter is critically reviewing the relevant studies done by the previous researchers regarding the TQM implementation and decision-making and reviewing the literature on the factors that play a role in decision-making and applied in TQM implementation provide a framework for the field study. Firstly, the chapter starts with definitions of quality and the TQM implementation and then an introduction to TQM implementation in the healthcare sector and what are the critical success factors of TQM implementation. Then it proceeds to the centralisation and decentralisation of decision-making and what the advantages and disadvantages are for both.

2.1 Quality- an explanation

According to the literature review on definitions of quality, there is no general agreement about which quality philosophy Iraqi healthcare should follow. Therefore, the perspective of all of the following: Crosby, Deming, Feigenbaum, Ishikawa and Juran are examined because they are well known for their contributions as well as their role in advancing quality in the 20th century. Their definitions of quality fit into two general classifications:

- 1- A simple matter of manufacturing products or delivering services whose measurable characteristics meet a fixed set of specifications that are usually numbering defined.
- 2- Implies that quality products and services are simply those that satisfy customer expectations for their use or consumption.

The definition in classification 1 argues that quality means to produce a product (or to provide a service) according to the predefined specifications and classification, two argues to satisfy the customer.

The essence of Phil Crosby's definition of quality is strictly a classification in which the quality of product or service is equivalent to being sure all measurable or to be more accurate, all measurable-characteristics of the product or service satisfy the characteristics' specification criteria. The main essential points of his definition are (Crosby, 1979):

- It is essential to define quality as conformance to requirements if we are to manage it.

- The customer deserves to receive exactly what we have promoted to produce. Means, we must know somehow the requirements and translate them (whenever possible) into measurable product or services.
- With requirements stated in terms of numerical specifications, it's possible to measure the characteristics of product (diameter of a hole) or service (customer service response time) to see if it is of high quality (zero defects). Zero defects are the attitude of defect prevention. It means (do the job right from the first time) (Crosby, 1979).

It is not at all clear from Crosby's definition whether there are many different levels of quality or merely two levels-acceptable and unacceptable. Is it the case, for example, that all product or service units that conform to the requirements are equal quality? Crosby does not address this issue, but one gets the impression that his answer to this questions is (yes).

Deming's perspective of quality is clearly consistent with the second level of classification. Deming's essential arguments are (Deming, 1988):

- Quality must be defined in terms of customer satisfaction.
- Quality is multidimensional. It is virtually impossible to define the quality of product or service in terms of a single characteristic or agent.
- There are definitely different degrees of quality. As quality is essentially equated with customer satisfaction, the quality of product will highly depend on the degree of satisfying customer's needs and expectations.

Feigenbaum's definition of quality is obviously a level two definition. The main essential points of his definition are (Feigenbaum, 1983):

- Quality must be defined in terms of customer satisfaction.
- Quality is multidimensional. It must be defined comprehensively.
- Because customers have to change needs and expectations, quality is dynamic.

He means that, as the quality assessment is up to the customer, we need to be close to our customer to measure their satisfaction and have the ability to translate the customer's satisfaction into product characteristics. This becomes essential. He emphasizes the role of marketing and production for the first evaluation of the level of quality customers want and how much they are willing to pay for it. The second reduces this marketing evaluation to the customer's exact specifications. However, determining how much customers are

willing to pay to obtain an approximation of their ideal product/service and then translating that information into specifications for a variety of product/service characteristics can be the real challenge for every TQM expert.

Ishikawa's definition of quality makes it clear that the proof of high quality is the satisfaction of every changing consumer expectations (Ishikawa, 1985). The essential points of his definition are:

- Quality is equivalent to consumer satisfaction.
- Quality must be defined comprehensively. It is not enough to say the product is of high quality; we must pay attention to the quality of every part of the organisation's role; the customer needs in achieving this ideal and note that this will be always changing. Hence, the definition of quality is ever changing.
- The price of product/ service is also important when evaluating its quality. Ishikawa believes that no matter how high the quality if the product is overpriced, it cannot gain the customer's satisfaction. Therefore, quality cannot be defined without considering the price.

Juran defined quality as *fitness for use*. The first part of the definition itself (use) is apparently linked to customers' needs, and the second part (fitness) suggests conformance to measurable product characteristics. This definition, however, implies an understanding of the relationship between customer satisfaction and the conformance of product characteristics to product specifications (Juran and Gryna, 1988).

Taguchi defined quality as the avoidance of the financial loss of a product to society after being shipped (Taguchi and Wu, 1979). The losses to society with respect to the product quality fall into two main groups: the first losses incurred as a result of destructive effects to society e.g. pollution and the second losses incurred because of excessive variations in functional performances. This indicates that the cost of quality should be measured as a function of product performance variation and the losses measured system-wide. The main essential points of his definition are:

- The measurement of the quality of a manufactured product is the total loss generated by that product to the society.
- To control the quality of product, the focus is on "achieving the targeted value and minimizing the variability around the target value", instead of "achieving conformance to the specification".

Taguchi's objective is to focus on minimising loss to society in order to maximise quality. Process and product design can be improved through the identification of controllable factors and their setting, which minimising the variation of a product around a target response.

Quality should be defined comprehensively. It is not sufficient to meet numerically a fixed set of specifications, the focus must be on every aspect of an organisation towards the satisfaction of both internal and external customers and to minimise the societies' dissatisfaction.

2.2 Introduction of TQM implementation

Total quality management (TQM) is a set of opinions and ideas for improving the quality of products or services, which widely called "management philosophy". Its main aims are to satisfy customers and survive in the market (Neyestani and Juanzon, 2016). Without a doubt, quality experts (gurus) had the significant roles to expand and transform the concept of quality from a mere technical system to a broader body of knowledge known as total quality with management implications in production (Maguad, 2006). Historically, TQM first emerged by the contributions of quality gurus, such as Deming and Juran in Japan after Second World War. Then Crosby, Feigenbaum, Ishikawa, and others had developed this powerful management technique for improving business quality within the organizations. During the period 1980s to 1990s, many national and international quality awards (QAs) have been established to provide guidelines for implementing TQM based on the suggestions and theories of TQM gurus (Neyestani and Juanzon, 2016, Neyestani, 2016).

As demonstrated in Table (2.1), each of these pioneers provided foundational building blocks for a systematic method to focus on total quality management (Bahri et al., 2012).

Table 2.1 TQM Gurus

Pioneer	Year	Quality Management
W.E.Deming	1950	14 Principles of Quality, 7 deadly sins and diseases / PDCA.
AV. Feigenbaun	1961	Concept: Make it right at the first time (One Basic TQM).
Koaru Ishikawa	1979	Statistical Approach in Quality Control and Fishbone.
Philip B. Crosby	1979	Top Management in Quality, 14 steps for quality improvement.
Joseph M. Juran	1988	Cost of the quality, SPC Quality, and Juran's quality triangle.

Dr W. Edwards Deming has emerged as the most influential guru of quality management in the United States and Japan, he is best known for the “Deming Cycle”, his “Fourteen Points”, and “the Seven Deadly Diseases” (Forbes and Ahmed, 2010). Deming (1986) worked with statistical sampling to improve quality and also introduced the concept of “Variance” to the Japanese and systematic approach to problem-solving which eventually was called the Plan, Do, Check, Act or PDCA cycle, and that was during the Second World War. In the early 1950s, Japanese products were burdened with defects and were known as poor quality products with the product of other countries in contrast. Deming emphasised to Japanese that the most of the troubles in production are with the “process” and “that statistics can be used to control that process” (Oberlender, 2000). The Deming cycle (PDCA) can improve the efficiency of the processes of the organisations to achieve successfully the satisfaction of customer and quality objectives (Neyestani, 2016). Deming believed deeply that “85 percent” of all quality problems is belonged to management, “quality improvement” can just be happened by management action to change the process. The rest is “15 percent” of the quality problems that can be led to solving by the “workers on the floor or operator level” (Montgomery, 2007, Kerzner and Kerzner, 2017).

Juran expanded the tools set available for producing quality products and managing organisation-wide quality by introducing the Pareto principle as an application of statistics to prioritizing process improvements (Juran and Godfrey, 1998). Feigenbaum was the first guru, who defined “Total Quality Control” as an effective system for integrating the quality-development, quality-maintenance, and quality-improvement efforts of the various groups in an organization to enable marketing, engineering, production and service at the most economical levels, which allow for full customer satisfaction (Feigenbaum, 1991). Kaoru Ishikawa is considered by many researchers to be the founder and first promoter of the ‘Fishbone’ diagram (or Cause-and-Effect Diagram) for root cause analysis and the concept of Quality Control (QC) circles (Ishikawa, 1985). These theories are regarded as the key founders of TQM philosophy, and the origin of TQM concept evolves mostly from their work.

According to what the gurus of TQM have done, the researcher studied the influence of decision-making process on TQM implementation. As, Deming cycle (PDCA) give the researcher an idea about the decision-making process. While, the whole six gurus revealed to the TQM implementation factors as the core of TQM, and without these

factors there is no TQM (Forbes and Ahmed, 2010). Thus, the following sections will discuss the CSFs further and especially in the healthcare sector.

2.3 TQM Implementation in the Healthcare sector

The TQM notion was first implemented in the manufacturing sector in the early 1980s, followed by the service sector and other sectors. In recent years, many healthcare institutions have applied the principles and practices of TQM in order to try to solve most of the problems that they are facing (Talib *et al.*, 2011b)

Healthcare services need to deal with quality as a fundamental part of the marketing of health care services, and hospitals are supposed to have a significant competitive factor compared to other hospitals. The perfect outcomes for hospitals of optimal service delivery, efficiency and cost benefits to people and different communities could be considered an ideal outcome for the quality of healthcare (Alasadi and Al Sabbagh, 2013, Bakan *et al.*, 2014). Furthermore, Nekoei-Moghadam and Amiresmaili (2011) found sometimes hospitals did not reach the expectations of patients, as the healthcare did not provide services according to what the patients expect. While when performance meets or exceeds expectations, then the perceived service quality is satisfactory (Holder and Berndt, 2011).

The healthcare sector has different concepts for quality, which is related to who is defining it. For example, quality could be defined according to the patients' perspectives and how the patients will be satisfied regarding the hospital services. In addition, quality could be defined according to the healthcare provider, who is looking for how to reduce the cost and get the best results at the same time (Chow-Chua and Goh, 2000, Yang, 2003). However, Quality is defined as the art of doing the right things at the right time, in the right way and for the right person to have the best results (Zineldin, 2006).

Organisations within the competitive global economy are continually looking for improvement. This enhancement and change in organisational performance depend on high individual preparedness for this change, which leads to success in the implementation of change (Choi and Ruona, 2010). As Henry Ford said, "*You can do whatever you like except stay as you are*" (Strudy and Grey, 2003). TQM implementation is one of these transformational innovations and one of the most significant developments of management practices. TQM is an approach of the directorate, which leads to the involvement of everyone from the staff at every level and all aspects of the organisation.

The aim of TQM implementation is not just achieving customer satisfaction, but also how to keep continuous improvement in the services or products that helped to achieve this satisfaction (Duh et al., 2012, Dahlggaard-Park, 2011). However, especially in the public sectors, no many staff would be involved to be part of this process, as this sector keep a high level of centralisation in decision-making, which is inconsistent with what the TQM implementation expects.

There are a few studies, however, that have been conducted in non-profit organisations, which mentioned that the aim of TQM implementation is not just to minimise the cost of services or products, but how to implement TQM effectively and this implement will lead to getting a customer satisfaction because of the customer concern about the quality of services as well as the cost of it (Arshida and Agil, 2013, Mosadeghrad, 2014c, Ooi *et al.*, 2011, Talib *et al.*, 2011a). Both public and private sector looking for this point, however, public sector looking for the quality of services more than the cost, while the private sector considers the cost and the quality to get a competitive advantage compared to other hospitals. The TQM success in the industry has encouraged healthcare managers to examine whether it can work in the health sector, accordingly, many healthcare organizations increasingly implemented TQM principles to improve the quality of outcomes and efficiency of healthcare service delivery (Mosadeghrad, 2015).

In healthcare services there are three definitions of distinguished TQM from other approaches:

The first one, TQM is a comprehensive strategy of organizational and attitude change for enabling personnel to learn and use quality methods, in order to reduce costs and meet the requirements of patients and other customers (Øvretveit, 2000). The second one, Maximization of patient's satisfaction considering all profits and losses to be faced in a healthcare procedure (Donabedian, 1989). Third, TQM is about two things: a management philosophy and a management method. They propose four distinguishing functions, which are often defined as the essence of good management, which includes:

- Empowering clinicians and managers to analyse and improve the process
- Adopting a norm that customer preferences are the primary determinants of quality and the term “customer” includes both the patients and providers in the process;
- Developing a multidisciplinary approach which goes beyond conventional departmental and professional lines; and

- Providing motivation for a rational data-based cooperative approach to process analysis and change.

There is no specific definition for TQM, as everyone defines it according to his view and how he looks to the TQM, and according to the literature the researcher defined TQM implementation in healthcare services as the commitment of the SM which in turns lead to involving the staff in TQM implementation process and authorised them to reach the patient's satisfaction.

The Iraqi government started to implement TQM in the healthcare sector in order to develop this sector. However, the healthcare sector includes public and private hospitals, and these different sectors follow the different managerial system, as the public sector working with a high level of centralisation in decision-making, while the private sector working with a high level of decentralisation. Thus, it is interesting to study how the TQM is implemented in these two sectors and what are the TQM implementation factors, which lead to the best outcomes, but before that need to know what is the critical success factors. The following sections will explain this further.

2.4 What is Critical Success Factor (CSF)

The original piece of work involving critical success factors (CSFs) was written by John Rockart (1979) in a Harvard Business Review article called *“Chief Executives Define Their Own Data Needs”*, the author observes: *“Critical success factors thus are, for many businesses, the limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organisation. They are the few key areas where ‘things must go right’ for the business to flourish. If results in these areas are not adequate, the organisation’s efforts for the period will be less than desired”* (p.85). This definition is widely accepted among other scholars employing the critical success factors such as Boynton and Zmud (1984), Flynn and Arce (1997) and Shank *et al.* (1985).

In addition, Rockart and Bullen (1986) provide a set of useful summary in their seminal work on critical success factors as:

- Key areas of activity in which favourable results are essential to reach established goals
- key areas where things must go right for the business to flourish
- ‘factors’ that are ‘critical’ to the ‘success’ of the organisation

- key areas of organisational activities that should receive constant and careful attention from management

Therefore, CSFs can be considered as a qualification or resource that is worth for an organisation to invest in, which it can result in significant differences in organisation's performance. The next sections will explain further the CSFs of TQM implementation, and the reasons for choosing these factors.

2.5 The Critical Success Factors of TQM implementation

It is important that researchers understand the importance of Critical Success Factors (CSFs) and include the vital few CSFs in their research. This will help to develop reliable instruments and to study the effect on TQM performance (Karuppusami and Gandhinathan, 2006). There were many authors identified the CSFs of TQM implementation.

Previous authors (Adeoti, 2011, Antony *et al.*, 2002, Arsić *et al.*, 2012, Arumugam *et al.*, 2011, Arumugam *et al.*, 2009b, Asif *et al.*, 2013, Chang, 2005, Dayton, 2001, Latif, 2014, Mellahi and Eyuboglu, 2001, Mittal *et al.*, 2011, Mosadeghrad, 2013, Mosadeghrad, 2014b, Park *et al.*, 2012, Pimentel and Major, 2015, Sabet *et al.*, 2012, Seetharaman *et al.*, 2006, Suwandej, 2015, Talib *et al.*, 2011a, Tang and Cai, 2011, Yusof and Aspinwall, 1999) agreed that the CSFs of TQM implementation which are considered as a driving factors, need serious attention and there were; senior management commitment, staff involvement and teamwork, training, employee empowerment, continuous improvement and communication. Others authors identified these factors as crucial elements of successful TQM implementation (Jamali *et al.*, 2010, Khanna *et al.*, 2011, Kumar and Sharma, 2015, Lu and Sohal, 1993, Pimentel and Major, 2015, Salaheldin, 2009, Seetharaman *et al.*, 2006, Yusof and Aspinwall, 1999).

Each of these factors is complete the others, as top management is responsible for employee management and training of employees (Sila and Ebrahimpour, 2005). In addition, senior management, as well as the employees, determine the communication within the organisation (Tari *et al.*, 2007). Senior management commitment is one of the most important CSFs, and if organisations do not implement the CSFs properly, succeeding CSFs like 'training and learning' will also lack proper implementation (Abdullah *et al.*, 2008, Calvo-Mora *et al.* 2013, Talib *et al.*, 2011a). Furthermore, the quality managers confirmed the importance of continuity to the TQM implementation,

and this continuity needs training and staff involvement of employees (Adeoti, 2011, Jamali *et al.*, 2010, Sabet *et al.*, 2012). In addition, these factors were mentioned by previous authors who did empirical and exploratory studies in different public and private sectors, and Table 2.1 below provides a summary of that.

Table 2.2 CSFs of TQM implementation

The CSFs of TQM	Public sector (Centralised)	Private sector (Decentralised)
Senior Management Commitment (SMC)	There are many studies revealed that SMC is one of the important factors for TQM implementation in healthcare sector (Ajmal <i>et al.</i> , 2016, Alolayyan <i>et al.</i> , 2011, Askarian <i>et al.</i> , 2010, Bakan <i>et al.</i> , 2014, Claus, 1991, Eva and Urban, 2005, Mahapatra, 2013, Mohammad, 2015, Mosadeghrad, 2013, Mosadeghrad, 2014c, Nwabueze, 2001, Short and Rahim, 1995, Sue, 2001).	SMC is one of the important factors for implement TQM and without this commitment, the implementation will be failed. (Aly and Mark, 1993, Askarian <i>et al.</i> , 2010, Chiarini and Baccarani, 2016, Claus, 1991, Eva and Urban, 2005, Mahapatra, 2013, Mohammad, 2015, Mosadeghrad, 2013, Mosadeghrad, 2014c, Short and Rahim, 1995, Sue, 2001, Uche, 2014, Zabada <i>et al.</i> , 1998).
Staff Involvement and Teamwork	Involving staff in the managerial process and working as a team in the centralised sector is one of the main factors of success TQM implementation, especially when there is coordination between the local department and the main one. (Ajmal <i>et al.</i> , 2016, Chang <i>et al.</i> , 2010, Emmert and Taher, 2002, Guerra <i>et al.</i> , 2015, Hietschold <i>et al.</i> , 2014, Hsu <i>et al.</i> , 2011, Lakhe and Mohanty, 1995, Mosadeghrad, 2013, Soltani <i>et al.</i> , 2005).	Staff involvement and teamwork is considered as one of the main factors of TQM implementation, as TQM encourage staff to be part of the implementation process, and this is more available in decentralised sector (Boon <i>et al.</i> , 2007, Dedy <i>et al.</i> , 2016, Jun <i>et al.</i> , 2006, Mohanty and Lakhe, 1998, Oprescu, 2012, Prajogo and Cooper, 2010, Sabet <i>et al.</i> , 2012, Soltani <i>et al.</i> , 2005).
Training	Staff need the training to be more qualified to implement TQM regardless of the context. (Chang and Chu, 2003, Dahlgaard-Park, 2011, Eskildsen <i>et al.</i> , 2004a, Harrington <i>et al.</i> , 2012, Keeble-Ramsay and Armitage, 2010, Lakhe and Mohanty, 1995, Lindberg and Rosenqvist, 2005, Mellahi and Eyuboglu, 2001, Mittal <i>et al.</i> , 2011).	Training helps to provide staff with more preparation to let the organisations be more decentralised. (Baig <i>et al.</i> , 2015, Cetindere <i>et al.</i> , 2015, Jamali <i>et al.</i> , 2010, Jiménez-Jiménez <i>et al.</i> , 2015, Kumar and Sharma, 2015, Sharma and Kodali, 2008, Terzic-Supic <i>et al.</i> , 2015, Thomes, 1992, Valmohammadi, 2011, Yusof and Aspinwall, 2000b).
Employee Empowerment	Implement TQM effectively need staff to be empowered to let them feel they are part of the implementation process. (Ajmal <i>et al.</i> , 2016, Al-Shdaifat, 2015, Arshida and Agil, 2013, Arumugam <i>et al.</i> , 2011, Askarian <i>et al.</i> , 2010, Dayton, 2001, Jamali <i>et al.</i> , 2010, Judith, 2012, Kock 1991, Mittal <i>et al.</i> , 2011, Mosadeghrad, 2013, Mosadeghrad, 2014b).	Employee empowerment within the TQM implementation helps staff to have more loyalty to the organisation, as they feel like they are part of organisation process; this is more likely to happen in the decentralised sector. (Boon <i>et al.</i> , 2007, Ehigie and Akpan, 2004, Emamgholizadeh <i>et al.</i> , 2011, Hietschold <i>et al.</i> , 2014, Jamali <i>et al.</i> , 2010, Latif, 2014, Mensah <i>et al.</i> , 2012, Mittal <i>et al.</i> , 2011, Mosadeghrad, 2015, Sadikoglu and Zehir, 2010).

Continuous Improvement	Continuous improvement is one of the main factors for implement TQM effectively and does not matter whether it is in a centralised sector or decentralised. (Askarian et al., 2010, Bakan et al., 2014, Bolatan et al., 2016, Brown et al., 2008, Cetindere et al., 2015, Dubey and Gunasekaran, 2015, Eva and Urban, 2005, Mahapatra, 2013, Mittal et al., 2011, Moosa et al., 2010, Mosadeghrad, 2013, Mosadeghrad, 2014c, Nwabueze, 2001, P. and J., 1999)	In decentralised sector organisations, consider continuous improvement as one of the main factors of TQM implementation, as its help an organisation to achieve the customers' satisfaction. (Abusa and Gibson, 2013b, Adeoti, 2011, Ahmad and Elhuni, 2014, Al-Shdaifat, 2015, Aly and Mark, 1993, Antony et al., 2002, Arshida and Agil, 2013, Arumugam et al., 2011, Bhuiyan and Baghel, 2005, Cetindere et al., 2015, Krasachol and Tannock, 1999, Kumar et al., 2011)
Communication	Communication is one of the TQM implementation factors and it is considered as a tool to keep staff commitment, as staff should be informed about the organisation's goals and the processes to reach these goals. However, the communication is at a high level in the centralised sector as its link the main department with the local one. (Kumar and Sharma, 2015, Park et al., 2013, Servaes, 2009, Sue, 2001, Talib et al., 2013, Yapa, 2012, Yusof and Aspinwall, 1999).	Successful implementation of TQM need business to be competitive insight of the global competitive environment, and communication increases the power of the organisation, and this is what the decentralised managerial is looking for. (Baig et al., 2015, Dayton, 2001, Ellen et al., 2014, Firlar, 2010, Jackson, 2001, Jianu et al., 2013, Mahmoud et al., 2014, Mittal et al., 2011, Musenze et al., 2014)

The table above contained the CSFs of TQM implementation, which were mentioned by previous authors, and in addition to that, there are other reasons to consider these factors in this study. The first reason is the previous authors considered these factors as a driving factor and without these factors implementation of TQM will not succeed. This is in line with what (Rockart and Bullen, 1986) mentioned that critical success factors are the key areas of activity in which favourable results are essential to reach established goals.

The second reason, these factors have been mentioned as a CSFs in healthcare sector (Claus, 1991, Irfan et al., 2014, Jackson, 2001, Kumar and Sharma, 2015, Mosadeghrad, 2013, Mosadeghrad, 2014b, Talib et al., 2011a), in addition to, it has been studied according to private and public sectors, which is in line with what this study is looking for.

The third reason, there is a linkage between these factors, as choose one of them to lead to consider the other. For example, the top management need authority to implement TQM, this authority leads to having a commitment from them, and for successful implementation, training and staff involvement are needed.

Finally, Iraqi hospitals starting to implement TQM recently, and these factors are considered as the main factors especially for new implementation (Saraph et al., 1989, Black and Proter, 1996, Joseph et al., 1999), and because of that, these factors have been considered as the CSFs to study, as without these factors implementation will not be exist.

However, there is another factor was considered as one of the CSFs of TQM implementation, this factor is the customer focus, but the author did not address this factor in the study. The customer focus contains internal and external customers. Internal customers who are the hospitals' staff, and this staff either do not have knowledge regarding TQM implementation or they do not have authority to make decisions, while external customer is the patient, who already do not have authority to make a decision regard TQM implementation; however, the researcher looking for the staff who have the authority to make a decision and have knowledge regarding TQM implementation at the same time, which makes them able to answer the research questions accurately, because of that, the author excluded this factor from the study. Thus, the author of this study decided to focus on the six factors identified in the table.

In reviewing the literature, this paper establishes a *definition* of TQM implementation, as the TQM implementation can be defined as a tool for continuous improvement that involves all employees from upper management to lower level. The focus of the improvement program is to improve customer service and reduce waste in the business. Quality improvement teams use problem-solving techniques and analysis to identify and eliminate weaknesses in the organisation. Therefore, by involving staff in the decision-making process with consideration of the centralised and decentralised decision-making, this study tried to explore how these processes shape the TQM implementation in Iraqi hospitals.

The next subsections are structured to provide an overview of what previous research revealed regarding the six CSFs of TQM implementation.

2.5.1 Senior Management Commitment (SMC)

Many studies revealed that SMC is the most important factor for implementing TQM especially in health care organisations (Adeoti, 2011, Ahmad and Elhuni, 2014, Ajmal *et al.*, 2016, Al-Shdaifat, 2015, Latif, 2014, Mellahi and Eyuboglu, 2001, Mittal *et al.*, 2011, Pimentel and Major, 2016, Sabet *et al.*, 2012, Talib *et al.*, 2011a). Furthermore, the senior management (SM) are responsible for encouraging everyone to take responsibility and

sharing in decision-making processes (Arsić *et al.*, 2012, Arumugam *et al.*, 2009b, Oakland, 2011, Mosadeghrad, 2014a, Punnakitikashem *et al.*, 2009).

Since the early steps of TQM implementation, the studies revealed the importance of involving SM in the implementation processes, as they connected customer satisfaction with quality (Swinehart and Green, 1995). It is accepted with any action, if there is no commitment from the top management, then this action will fail (Jamali *et al.*, 2010, Mensah *et al.*, 2012, Mosadeghrad, 2013, Mosadeghrad, 2014b). Chiarini and Baccarani (2016) pointed out that the SM is one of the main factors of TQM implementation, which helps to achieve benefits by linked a patient satisfaction and improve organisation performance at the same time. Mensah *et al.* (2012) added that SMC is inevitably considering the number one of TQM implementation factors. He stated that employees' initiatives and creativity would not be available without a commitment from the SM.

Beer (2003) concluded that leadership skills and commitment were needed for TQM implementation; this commitment will help to create a climate for learning and further change. This point of view was supported by Cetindere *et al.* (2015) who revealed that SMC helped organisations to ensure that their staff receive the necessary training on quality and support continues improvement.

Yapa (2012) revealed in his study that, even when the managers have the enthusiasm to implement TQM, that did not mean they have fully understood the implementation processes, techniques and philosophies; however, there is an inconsistency with this argument as Way *et al.* (2016) mentioned that, when the managers have the enthusiasm to implement TQM, that means they have awareness about any techniques to help the implementation steps. In the same context, Taylor and Wright (2003) mentioned that the SMC is an essential factor leading to success in TQM implementation, as the SM responsible for making sure that the majority of staff are involved in the implementation of TQM. Khanna *et al.* (2011) indicated that the SM ensures availability of the sufficient resources, which are related to quality activities and that happening when they have clearly understood of quality goals.

Soltani *et al.* (2005) pointed out that the effectiveness of TQM implementation is because there is a close relationship between SMC, staff commitment and the process of TQM implementation. As the SM supposed to share their vision with employees regard TQM implementation and at the same time ensure the staff understand what the benefits of the

implementation of TQM are. Vice versa, when there is less or lack understanding of TQM implementation process, that because the managers show less commitment. This point of view was supported by Jamali et al. (2010) who stated that lack of SMC leads to ineffective TQM implementation because SM who are responsible for creating an organisational climate.

Thus, SM, the individuals' guidance, who is responsible for helping staff to understand the implementation process and encouraging them to be part of this process, because of that without SMC, the implementation will be failed. In addition to the SMC, staff involvement is a very important factor for TQM implementation and the next subsection explained this further.

2.5.2 Staff Involvement and Teamwork (SI)

The employees who cooperate positively with their superiors and between themselves work as a team. This will contribute to greater the degree of job satisfaction (Chang *et al.*, 2010, Sabet *et al.*, 2012). TQM depends on teamwork heavily. Every organisation needs teamwork to achieve the goals of the organisation because, without teamwork, the organisation might fail. In addition, teamwork helps to improve staff performance (Xyrichis and Ream, 2008).

Deming claimed that employee's involvement and participation at all level improves the quality of the current and future services/products. Even the non-managerial staff can make contributions if they are involved in quality improvement processes (Boon *et al.*, 2007, Sadikoglu and Zehir, 2010). Oakland (2003) stated that TQM is more efficient when there is teamwork in an organisation because teams improve the decision-making process, which leads to much faster and more economical results. This point of view was supported by Antony *et al.* (2002), who indicated that TQM ensures everyone in the organisation should have a clear understanding of what is required and how staff processes related to organisational outcomes as a whole. This clear understanding encourages and motivates employees to control and manage and improve processes.

Staff involvement and Teamwork are very important in solving problems, creating a feeling of loyalty and implementing plans. In addition, they are useful for creating trust between the staff and improves the communication between them. In general, people enjoy interacting with each other. The interactive relationships between the employees

help to affect the effectiveness of the organisation and job satisfaction (Eskildsen *et al.*, 2004b, Martensen and Gronholdt, 2001, Parumasur and Govender, 2013).

Chang *et al.* (2015) concluded that involve organisation staff and working as a team helps organisations to achieve a higher level of skill performance and creates an effective attitude to solving problems. Evans and Lindsay (2007) support this point of view saying that teamwork helps to empower staff and increase problem-solving skills; however, Parumasur and Govender (2013) mentioned that TQM implementation needs both individual and teamwork in an organisation. Teamwork helps to minimise the barriers between the employees and link them together, while individual work helps staff to build a feeling of responsibility and increase their confidence. In addition, minimise errors of organisational output and defect monitoring which includes behaviour factors and employees' motivation, all these are the responsibility of teamwork.

Arsić *et al.* (2012) concluded that teamwork is very important for managing changes and plan TQM implementation. In addition, teamwork helps to create trust between employees and improving communication. This point of view was supported by Hietschold *et al.* (2014) who concluded that when staff involvement and working as a team and sharing a required information, that's will help to develop trust between each other, in addition, to improve the problem-solving process by producing results quickly. Mosadeghrad (2013) indicated that the healthcare sectors are among the most complex sectors serving humans and need teamwork efforts to improve the quality of the services and without involving the staff this system cannot achieve this quality.

It seems that the staff involvement and teamwork is a fundamental issue if the implementation of TQM is effective especially in the healthcare sector. Teamwork and staff involvement can be defined as the factor, which helps to minimise the barriers between staff and increase confidence in themselves, in addition, it contributes to empower staff and raise the effectiveness of problem-solving. Furthermore, people are most willing to support any efforts in which they have taken part or helped to develop, and employees need the training to be more confident to involve in the implementation process; however, the next subsection explained the importance of the training to the TQM implementation.

2.5.3 Training (T)

Training has become key for the field of employment in business for many years. In different training programmes (like quality improvement, developing the staff performance, reducing injuries in some dangerous fields and training how to use new things), the most important points, which the organisations were looking for, were the internal benefits from the staff training; however, the training concept was developed a lot, as the organisations were looking for training as programmes for effectiveness, such training is now a principal aspect of organisation development and competitiveness (Chow *et al.*, 2008, Elmishri, 2000, Parumasur and Govender, 2013). This point of view was supported by Thomes (1992, p.96) who stated: *“training is the bridge between an individual’s present performance levels, and those required for the organisation to be more effective in meeting the challenge of change and increasing competition”*.

Training is necessary for sustain organisation and advancement, and this considered to be one of the TQM pillars by all of the awards (Kanji, 2002, Crosby, 1979). Furthermore, training provided to allow employees to get higher skills, in addition, to including some techniques, such as managerial skills for decision-making and statistical methods (Tetteh, 2015). Organisations have been making huge efforts to adapt to the changing the business environment and how to be capable of improving the competitiveness (Lim *et al.*, 2007). Velada *et al.* (2007) and Noe *et al.* (2006) have concluded that investment in training events has increased all over the world, and in order to justify this investment it is important to provide proof that training efforts are being fully recognised and to make sure that training leads to the desired outcomes and increases in work performance.

Insufficient training and lack of continuous training considered as obstacles to success in TQM implementation in the healthcare sector (Mosadeghrad, 2013, 2014). McCracken *et al.* (2012) found the uncertain environment throughout the public sector was the greatest inhibitor to training participation. The author suggests that to maximise return on training investment, the public sector must support training participation.

Training is one of the most important factors for any organisation, and there is a high demand for training programmes if either it is formal or informal, as training enhance the organisational outcomes and increase a competitive percentage (Terzic-Supic *et al.*, 2015). Furthermore, the value of a developmental learning view on the implementation of the TQM concept is common in various organisations. Some of them implement TQM

smoothly, others struggle and sometimes even abandon the initiatives, but the successful implementation depends on how the learning has occurred during implementation (Gremyr and Elg, 2014).

Latif (2014) mentioned that training is the development source for any organisation. Ajmal et al. (2016) concluded that training plays a vital role in the success of the TQM implementation and training was one of six factors the study mentioned. Ahmad and Elhuni (2014) did their study in Libya and training was one of eight factors the study mentioned. Al-Shdaifat (2015) also considers training in his study as one of the five factors important to implementing TQM in Jordan. Arsić *et al.* (2012) argue that training leads to enhancing the employees' skills and opportunities for more development. Oakland (2003) believes that training is one of the most important factors for performance improvement, but at the same time, it can be costly for organisations if the money is not wisely spent. However, Talib *et al.* (2013) indicated that training spread the knowledge of continuous improvement to get the benefits and business excellence.

Khanna *et al.* (2011) indicated that quality attitudes and loyalty feeling towards organisation creating training, which helps in organisation developments. Training of TQM contributes to building a human capital and also provides staff with more preparation to let the organisation be more decentralised. Gremyr and Elg (2014) mentioned that one of the solutions offered to minimise the implementation difficulties is improving training. In addition, training is an essential factor for both managers and employees to help them prevent errors (Jiménez-Jiménez *et al.*, 2015, Parumasur and Govender, 2013).

Thus, the definition of training is a key factor, which affects the effectiveness of TQM implementation, as it increases the knowledge of staff and enhances their skills and attitudes regarding new processes. In addition, when staff trained well, they will be more willing to accept the empowerment, which is given by the SM or the GD. The next subsection explains employee empowerment.

2.5.4 Employee Empowerment (EE)

A good relationship between employees and their superiors provides staff with the ability to share in decision-making, a high percentage of empowerment and great support. Many studies support this positive relationship between staff and their superior lead to get a job satisfaction, minimise tension and improve organisation performance (Dedy *et al.*, 2016,

Emmert and Taher, 2002, Eskildsen *et al.*, 2004b, Lakhe and Mohanty, 1995, Martensen and Gronholdt, 2001).

Slack *et al.*, (2004) revealed that empowerment is more than autonomy, as autonomy related to the ability of staff to change process of how they do those jobs, while empowerment is related to authority of staff to make modification in the jobs itself.

Arsić *et al.* (2012) concluded that EE is one of the main factors of TQM implementation, as EE helps organisations to reach the employee satisfaction. When Staff do not empower, then they cannot make any change or progress in organisation performance, while TQM encourages staff to have more authority. Jamali *et al.* (2010) support this point of view, as he indicated that employees would feel like a part of the organisation when they empowered and encouraged to control and improve the process within their space of responsibility. Latif (2014) mentioned that employees seek to improve the quality of organisation and should have the empowerment to do that, as they are who facing work problems and can help effectively to solve it when they are empowered. This point of view was supported by Hietschold *et al.* (2014) who indicated that empowerment fosters bottom-up identification of quality problems, and employees can quickly respond to potential errors if they have the authority to do that. In addition, empowerment help to reduce a supervision and any related costs.

Mensah *et al.* (2012) mentioned that because employees who are in a direct contact with products or services, so, supposed to be they are empowered and well equipped with the knowledge to get a desirable outcome. Employees, who have some level of empowerment, have control over their work, over the way that works is carried out, and the quality of output has a higher degree (Mosadeghrad, 2013). Mersha (1997) highlighted that the failure to empower staff is one of the factors, which lead to failure in implementing TQM. Antony *et al.* (2012) argue that organisations need every effort to involve every organisational member as fully as possible in continuous improvement activities. This also was supported by Mosadeghrad (2015) who revealed that successful TQM implementation needs employee empowerment and staff involvement as key factors for the implementation and that because TQM success is driving by employees, and the implementation responsibility is related to them, because of that employee's empowerment is influence on employees results, customer results and organisation results.

Ehigie and Akpan (2004) indicated that organisations should put into consideration employees rewards for their efforts, as this encourages them to be empowered and have more responsibility.

It appears from the literature that employee empowerment is a key issue if the implementation of TQM is effective. However, a lack of employee empowerment considers as a barrier to continuous improvement, which will be discussed in the next subsection.

2.5.5 Continuous Improvement (CI)

In the early steps of quality implementation, the organisations were looking for how to minimise the cost and get quality in services or products as much as possible. Then TQM started to integrate the staff efforts to gain a competitive advantage by CI for the all of the implementation steps (Lakhe and Mohanty, 1995). Furthermore, CI is one of the key factors for successful TQM implementation as many authors were mentioned (Ajmal *et al.*, 2016, Chang *et al.*, 2015, Guerra *et al.*, 2015, Lakhe and Mohanty, 1995, Nawelwa *et al.*, 2015, Prajogo and Cooper, 2010, Zeng *et al.*, 2015) as the process of the implementation is about continuous improvement.

Chow-Chua and Goh (2000) concluded that CI leads to streamlining processes work in addition to saving time and costs. This point of view was supported by Talib *et al.* (2011a) who argue that CI does not let the organisation and the staff accept the minimum qualification or standards, but they will try to do best they can with the available resources. Arshida and Agil (2013) concluded that CI is one of the main three ingredients factors for TQM implementation, as CI discover and analyse implementation problems and helps to eliminate these barriers. Al-Shdaifat (2015) revealed that CI was the least implemented factor in Jordanian hospitals, especially in public ones, whereas it is higher in private hospitals than public ones and that is might be there is a competition to earn customer satisfaction and raise the hospital's profits.

The CI helps organisations to act upon ordinary and non-ordinary problems and to improve procedures. The role of employees has changed from workers to problem solver (Kumar *et al.*, 2011, Mun and Ghani, 2013). Sadikoglu and Zehir (2010) asserted that CI is the most important factor, which is mean never ending from searching to improvements and developing processes to find new methods which are helped to convert inputs to useful outputs. Furthermore, to improve organisations performance when implement

TQM, the best way is to continuously improve the activities of performance (Talib *et al.*, 2013).

In TQM, the focus is on how to achieve the philosophy of CI successfully and change within the organisation (Goldratt, 1988, cited in Musenze *et al.*, 2014); however, Parumasur and Govender (2013) revealed that CI needs to be followed by continuous top management support, training and teamwork. Terzic-Supic *et al.* (2015) and Yang (2003) indicated that continuous improvement needs training and education of all staff and physicians together with the use of different quality improvement approaches, tools, and techniques. This practice ensures that organisations and employees do not settle for minimum standards, but strive to do the best they can with the available resources.

It obvious from the literature that continuous improvement is one of the main factor of TQM implementation, whether in public or private sectors; however, continues improvement needs a good communication channel to link the organisation departments together and the next subsection explained this further.

2.5.6 Communication (C)

Communication was pointed out as an important factor for any organisation (Jianu *et al.*, 2013). Johansson (2007) and Musenze *et al.* (2014) indicate that organisations that have appropriate communication systems achieve the organisation goals (like reducing the cost of labour and increasing customer satisfaction) which are connected to a TQM programme effectively. This point of view is supported by Talib *et al.* (2013) who revealed a positive link between communication and TQM implementation, leading to improved quality performance. TQM implementation results in changing the organisation's processes and the ways of doing business. To improve these processes, the organisation needs an effective communication system between the top management and all staff in the different organisation sections.

Firlar (2010) concluded that successful implementation of TQM needs business to be competitive insight of the global competitive environment, and communication increases the power of the organisation. While, Samuelsson and Nilsson (2002) revealed that communication is considered as a tool to keep staff commitment, as the staff should be informed about the organisation's goals and the processes to reach these goals. Holt *et al.*, (2007) concluded that the wild range of staff access to information would help them to understand the programme change and the final objectives better. In addition,

successful TQM implementation needs effective communication to be a fundamental factor particularly in training, teamwork, staff involvement, and empowerment, and other modern practices of management. Moreover, organisation objectives and processes must staff be aware of it (Mahmoud *et al.*, 2014).

The essence of quality improvement processes, required to involve every one of the staff to personally focus on improved performance in the task which has been assigned to do, and need an environment of open and honest communication throughout the whole organisation and communication competencies of employees (Baig *et al.*, 2015). In addition, informal communication needs to be enhanced (Nusrah *et al.*, 2006).

Oakland (2003) recommends that a communications plan must consider the following questions:

- Why should we communicate?
- What should we communicate?
- Whom should we communicate with?
- How should we communicate?
- When should we communicate?
- Where should we communicate?

Jackson (2001) insists that the organisation should have face-to-face communication between managers and staff, even if that requires time. This point of view is supported by Mosadeghrad (2014c) who indicated that poor communication between employees and managers in the healthcare systems leads to failing in TQM implementation. Taskov and Mitreva (2015) view communication as a tool to keep staff commitment, arguing that people supposed be informed about organisation targets and organisation performance must be visible for them.

It is obvious that communication is considered as an important factor, which affects staff effectiveness in the implementation processes and the organisation need to ensure people are up to date with any progress, which generates a feeling of involvement.

2.6 Introduction to Decision-making

This section starts with an explanation for decision-making and what the previous authors concluded regarding centralised and decentralised decision-making and proceeds to

explain the advantages and disadvantages of centralised and decentralised decision-making. The study of the difference between centralised and decentralised decision-making helps to understand the differences between public and private sector, which the study is looking for. As centralised decision-making reflects the public sector decisions, while decentralised decision-making reflects the private sector. The differentiation between the centralisation and decentralisation (the public and the private sectors) help to understand later on how its influence the TQM implementation.

Drucker (2001) p.242 stated '*Making good decisions is a crucial skill at every level. It needs to be taught explicitly to everyone in organisations that are based on knowledge*'.

There are many studies, which have divided decision-making into two modes, the first one is centralisation, and the second one is decentralisation (Carter and Cullen, 1984, Cullen and Perrewé, 1981, Park *et al.*, 2013, Pinochet, 1976, Zheng and Negenborn, 2014, Zannetos, 1965).

Lawrence and Loresh (1978) studied decision-making environment, depending on the situation of the organisation, which is working in. They found that organisations could work in two types of environment, stable and unstable. If the environment is stable then the centralisation of decision-making is possible, while if it is not then it will be better to work with high level of decentralisation in making decisions. This point of view was supported by Arcuri and Dari-Mattiacci (2010) who indicated that centralised and decentralised decision-making should consider the risk-return from the decision, which depends on which environment the organisation is working with. While, Evaristo *et al.* (2005) concluded that in centralisation and decentralisation there were three aspects to consider, control (which is considered as the main one), function (which is related to the responsibility within organisation structure) and decision making.

Bossert (1998) concluded that the decentralisation of decision-making affects positively on an organisation, which has a complex structure. While, Alexander (2015) considered homogenous and heterogeneous of the market which is an organisation working with, as he indicated that centralisation of decision-making is performed better than decentralisation when the organisation is working within homogeneous and a big market, while the decentralisation is performed better when the market is local and have heterogeneous. Bossert and Mitchell (2011) concluded that decentralisation of health care had been adopted the delivery of health services improvement widely. While,

decentralisation is making greater use of decision-making space than others, as it minimising a bureaucratic system that is lead to cost money and time in making decisions. At the same context, bureaucracy considered as one of the obstacles of TQM implementation.

Many of the reforms were paid attention to the internal characteristics of public organisational, and the degree of centralised decision-making (which decision belongs to the top level of management and which one belong to the lower level) as a limitation on the public services performance (Andrews *et al.*, 2007). This point of view was supported by Lægreid and Verhoest (2010) who indicated that public sector should structurally from disaggregate large to smaller and increases the degree of staff empowerment.

Akdere (2011) concluded that the role of decision-making is become more critical in organisations life, as it is an integral process influence each level inclusive of individual, group and organisation; however, Saiti and Eliophotou-Menon (2009) mentioned that there is an interaction between the decision makers contribution and organisation itself which leads to effective performance. While Friday-Stroud and Sutterfield (2007) concluded that managerial decision-making process is helped to assist managers in gaining and sustaining competitive advantage points of organisation life.

Hercheui (2010) called attention to the importance of discussing public policies with stakeholders or who is responsible for making decisions. The public policies have enforced some leaders for more centralised in decision-making processes. This point of view was supported by Tran (2014) who indicated that not necessary decentralisation in making decisions is a good thing, as sometimes the lower organisations have not encouraged enough to create positive change. Bossert (1998) mentioned that central government could encourage local decision-makers to participate in decision-making process to achieve health objectives. Gregory *et al.* (2012) mentioned that there are two aspects should be considered in making decisions approach. First, asking for people help from outside organisation (external consultant) either to train staff or to help them to make a decision. Second, staff supposed to trying set more than one alternative for any decision to be sure of the possibility of reaching the organisation goals.

Drucker (1995) cited in Parumasur and Govender, (2013) the most important decision may not be made by the team itself but rather by management about what kind of team to use, what experience they have. Moreover, a good decision does not guarantee a good

outcome. A growing sophistication with managing risk, a good understanding of human behaviour, and advances in technology have improved decision making in many situations (Arcuri and Dari-Mattiacci, 2010, Minas *et al.*, 2012). This point mentioned that training is one of the main factors to make a good decision, as teamwork with lack of training could not lead to make a good decision or get a good outcome, and this is in line with TQM implementation.

Based on private sector experiences, increased organisational authority is believed to lead to increased employee involvement (Lonti and Verma, 2003). However, too much authority with too controlling can prevent the delivery of service or product, in addition, to increase the passivity, refuse to follow the rules, unacceptance behaviour, and lack of initiative (Norman, 2001).

According to what the authors referred to above, no decision maker may have the ability to take the overall problem by himself. Decentralisation in decision-making is necessary in one hand, as several decision makers need to be empowered to make their own decisions depend on what information they have. At the same time, centralisation in decision-making is effective in another hand especially when the communications between distinct decision makers are allowed and efficient, also, when the staff have not encouraged enough to take the responsibility.

2.6.1 Centralisation of decision-making

Wiper (1949) cited in Amelsvoort and Scheerens (1997a) defined centralisation when discussing the theory of bureaucracy inside the organisation as: *“the degree of centralising and authorising managers of different levels in the process of making a decision inside the organisation”*. The centralisation of decision-making related to contingent factors represented by the size of the organisation, technology and environment. Centralised organisational structures rely on one individual to make decisions and provide direction for the company. Small businesses often use this structure since the owner is responsible for the company's business operations.

Al-Abbadi (2015) cited Burns and Stalker (1971) and Lawrence and Loresh (1978) indicating that the centralisation of decision-making is efficient when the environment is stable, and this centralisation leads to increasing the effectiveness of the organisation in fulfilling the goals of the organisation. While, Meyer and Hammerschmid (2010) mentioned that organisation with less complex could work in centralisation system

effectively, while it is not effective when the complexity increased. The paper did not explain complexity categories or how could know if the centralisation will be effective or not. This point of view was supported by Alexander (2015) who suggested that centralised organisations perform better when markets are wide and more homogenous.

Arcuri and Dari-Mattiacci (2010) concluded that centralisation helped to gather expertise together and it is rarely lead to an erroneous decision; however, if it fails that will result in global consequences. Wilkinson (2013) concluded that when the upper management does not have much confidence in the lower level of employees' ability to make and execute decisions properly, then the centralised structure would be beneficial.

Thus, the centralisation in decision-making is better to be implemented in small organisations than the big one because it will be less complexity, as normally the public organisations are huge and complicated. While the Iraqi government keep a high level of centralisation in decision-making in the public sector, especially in the healthcare sector, which is a huge sector and complicated.

2.6.2 Decentralisation of decision-making

Decentralisation has been identified as a key feature of operational governance changes in activation (van Berkel and Larsen, 2009). Decentralised organisational structures often have several individuals responsible for making business decisions and running the business. Decentralised organisations rely on a team environment at different levels in the business. Individuals at each level in the business may have some empowerment to make decisions (van Berkel and Larsen, 2009). This point of view was supported by Wynen *et al.* (2014) who indicated that staff have more commitment and empowerment when organisation follows decentralisation in decision-making and that leads to improving organisational performance. This is in line with Knies (2012) who revealed that transfer the authority from a top managerial level to lower levels would produce individuals who are committed, empowered, flexible and have a high level of motivation.

Arcuri and Dari-Mattiacci (2010) revealed that wrong decision is more applicable in decentralisation system, but it is consequences locally; however, Bouraoui and Lizarralde (2013) indicated that decentralisation lead to optimise staff efficiency and increase organisation benefit, as it helps to distribute staff responsibility properly and stakeholders sharing the risk. Matías-Reche *et al.* (2008) concluded that decentralisation in decision-making affects positively on the organisation and staff performance; also, this

effectiveness is related to the organisation size and the vertical complexity. This point of view was supported by Meyer and Hammerschmid (2010) who indicated that decentralisation is more efficient than centralisation when the organisational structure is complex. This point of view was supported by Alexander (2015) who indicated that decentralised organisations perform better when markets are localised and heterogeneous. Pollitt and Bouckaert (2011) mentioned that the effectiveness of organisation increased when the organisation adopted a high level of decentralisation in decision-making.

So basically, could define decentralisation, as the degree of the authority that was granted to the staff. The organisations who are working in the decentralisation of decision-making processes tend to increase this manner, and vice versa in case of the organisations tends to keep the authority at the top level. Decentralisation is more effective when organisation's structure is complex, which is normally be in the public sector; however, in Iraq, the public sector, especially in the healthcare sector, follow the centralisation in decision-making.

2.6.3 Comparison between Centralisation vs. Decentralisation of decision-making

Decision-making is about authority and the key question is whether the authority should be with the senior management at the top level which means centralised, or whether it should be delegated further down the hierarchy, away from the centre, which means decentralised.

The choice between centralised or decentralised is not an either/ or choice, as it is a complicated choice. The advantages of choose one are the disadvantages of the other. However, both centralisation and decentralisation have advantages and disadvantages. The explanation of this as shown below.

2.6.3.1 Advantages of Centralisation

Centralised organisations can be extremely efficient regarding business decisions. Business owners typically develop the company's mission and vision and set objectives for managers and employees to follow when achieving these goals in addition, centralisation is effective when the organisation work in stable environment and this effectiveness lead to fulfilling the organisation goals (Al-Abbadi, 2015, Bouraoui and Lizarralde, 2013, Marsh, 1992, Matías-Reche *et al.*, 2008, Meyer and Hammerschmid, 2010). Furthermore, centralisation may also allow the government to manage processes

closely and thus manage risks more directly. Implement common policies will be easier for the whole business in centralised structure, in addition to prevents part of the business from becoming too independence (Arcuri and Dari-Mattiacci, 2010, Zheng and Negenborn, 2014).

2.6.3.2 Advantages of Decentralisation

Decentralised organisations utilise individuals with a variety of expertise and knowledge for running various business operations. A broad-based management team helps to ensure the company has knowledgeable directors or managers to handle with different types of business situations in addition to distributing responsibility between the staff (Mankoe and Maynes, 1994, Nicolescu, 2014, Park et al., 2013, Zoghi and Mohr, 2011). Decentralised decision-making increases the ability to respond to local circumstance effectively, in addition to improve staff motivation as they have authority to participate and make decisions. Moreover, decentralised decision-making is a good way of training and developing junior management and it is consistent with aiming for flatter hierarchy (Minas *et al.*, 2012, Nicolescu, 2014, Park *et al.*, 2013).

2.6.3.3 Disadvantages of Centralisation

Centralised organisations can suffer from the negative effects of several layers of bureaucracy. These businesses often have multiple management layers stretching from the owner down to frontline operations. The business owner is responsible/ the main institution for making every decision in the organisation may require more time to accomplish these tasks, which can result in sluggish business operations. Centralisation is not effective when the organisation have complex organisational structure, and the wrong decision may lead to a huge consequence (Arcuri and Dari-Mattiacci, 2010, Matías-Reche *et al.*, 2008, Zheng and Negenborn, 2014).

2.6.3.4 Disadvantages of Decentralisation

Decentralised organisations can struggle with multiple individuals having different opinions on a particular business decision. As such, these businesses can face difficulties trying to get everyone on the same page when making decisions (Mankoe and Maynes, 1994, Zheng and Negenborn, 2014, Zoghi and Mohr, 2011). Tran (2014) mentioned that decentralisation is not necessary to be a good thing, as sometimes the lower organisation who receive the power do not have enough encouragement to create a positive decision

or make change, especially when the governmental department (GD) lose the control over the outcomes and supposed the lower organisation applicable to achieve the goals.

The table below summarised the advantages and disadvantages of the centralised and the decentralised decision-making.

Centralisation:

Table 2.3 Advantages and Disadvantages of Centralisation

Advantages	Disadvantages
It is easier for the owners to develop the organisation's mission and objectives.	Organisation can suffer from the bureaucratic.
It is effective to work in a stable environment.	It's can't be work effectively in an unstable environment
Prevent part of the organisation to become too independent.	The local managers can be too close to the customer needs.
Easier to control and coordinate with the main department or the centre.	Lack of staff empowerment down the hierarchy may lead to reducing the manager's motivation.
Quick decision especially when it is work in a small and non-complicated hierarchy.	Lack of the flexibility and speed of local decision-making and more time to accomplish each task.

Decentralisation:

Table 2.4 Advantages and Disadvantages of Decentralisation

Advantages	Disadvantages
Distributing the responsibility between staff.	Hard to manage when the staff have different opinions.
Increase the ability to respond to local circumstance.	It is hard to ensure consistent practices and policies at each location.
Increase staff motivation as they have the empowerment to be part of the decision-making process.	Sometimes the lower level managers do not have enough encouragement to make a good decision.
It is a good way of training and developing junior management.	Hard to achieve a financial control.
It's good when the environment is complex and uncertain	

It is not easy to find the appropriate balance between centralisation and decentralisation in decision making both have advantages and disadvantages, the advantage of one being the disadvantage of the other. Finding the right balance between both is a big challenge

for organisations or governments. However, in Iraq, the government keeps the centralisation in decision-making in the public sector and the decentralisation in the private once with no consideration if this policy is effective for this sector or not.

2.7 Chapter Summary

This chapter explained the CSFs of TQM implementation, in addition to, explanation of the decision-making and what are the advantages and disadvantages of centralised and decentralised decision-making. This chapter contributed to achieving part of the first objective: *To critically review and synthesise the relevant literature on TQM implementation and decision-making*. In addition to answering the first research question: *What are the Critical Success Factors of TQM implementation in Healthcare?*

Depends on the literature review in this chapter, the next chapter developed the theoretical framework which is investigated in the fieldwork.

Chapter Three

Theoretical Framework

Chapter 3 Theoretical Framework

3.0 Chapter Introduction

The previous chapter discussed part of the literature review, which contains the CSFs of the TQM implementation, in addition to, explaining the advantages and disadvantages of centralized and decentralized decision-making. However, this chapter will consider the matters from the literature reviews in chapter two and put them into a theoretical framework. This theoretical framework works as a lens to understand how and why the decision-making process shapes the TQM implementation factors in public and private Iraqi hospitals. The following sections discussed the decision-making theories and models in order to explain the reason for being part in this study.

3.1 Decision-making Theories

Decision theory, also known as, rational choice theory concerns the study of preferences, uncertainties, and other issues related to making "*optimal*" or "*rational*" choices (Simon, 1978). The next sections discuss alternative decision-making theories that have been adopted in TQM implementation studies in healthcare. Then, it explains the researcher's rationale behind rejecting some of these theories, while accepting others to inform his theoretical framework. Four theories have been critically reviewed, namely, "*Subjective Expected Utility*", "*Bayesianism*", "*Prospect Theory*", and "*Satisficing Theory*".

3.1.1 Subjective Expected Utility (SEU) Theory

Savage (1954) cited in (Schmeidler, 2004, Gilboa, 1987) developed the axiomatic subjective expected utility (SEU) theory in which a decision maker chooses between alternatives in the presence of risk. Savage assumption that the decision-makers always tend to seek pleasure and avoid pain, he made the following computations:

- Subjective utility that accounts on the individuals judged weightings of utility, rather than on objective criteria.
- Subjective probability that accounts on the individuals estimates of likelihood, rather than on objective statistical computations.

Suppose an uncertain event has possible outcomes each with a utility, then these choices can have a subjective probability either.

Larichev (1999) concluded that there were two reasons prevented this theory to be popular. First, the theory is based on the assumption that the decision maker will seek to reach well-reasoned decision based on consideration of all possible known alternatives (i.e., decision maker is always rational). Whilst human decision-making is more complex and can be irrational. Furthermore, Slovic and Tversky (1974) demonstrated that people do not believe in Savage axioms. Duncan Luce (1992) proved that the axioms of transitivity ⁴ and monotonicity ⁵ do not hold.

This theory assumed that decision-maker is always rational, while in the real life there is no perfectionism. In addition, the theory considered the individuals' judgment rather than objective criteria, lack of the criteria make the comparison between the public and private hospitals are difficult. Based on that, the theory has been rejected in this study.

3.1.2 Prospect Theory

To overcome the inherent limitations of the SEU theory, Kahneman and Traversky (1979) complemented it with the theory of choice that accurately describes how people actually go about making their decisions. The theory predicts that decision makers tend to be risk averse in the domain of gains. Similarly, the decision maker is relatively risk-seeking in a domain of losses (Kahneman and Traversky, 1979, Levy, 1992, 1997). The theory introduced two stages in the decision-making process. In the editing phase, the decision is presented, options are identified, and the outcome and their associated probabilities are ascertained. In the evaluating phase, a choice is made based on the reference point and the value of utility function (Levy, 1992, McDermott, 2004).

The theory still has a number of limitations even when it has tried to overcome the paradox of SEU theory. As the people in this theory fear losses more than the value they gains, so they weigh the probabilities of negative outcomes more heavily than their actual potential cost. Furthermore, just like SEU theory, the prospect theory is axiomatic basis

⁴ Transitivity: if X is preferred to Y and Y is preferred to Z then X is preferred to Z.

⁵ Monotonicity: either more of an attribute is preferred, or less of an attribute is preferred.

that could pose a challenge during validation. The same vague conclusion might stimulate different perceptions of gain or losses when reference points are changed (Larichev, 1999, Oliveira, 2007). Consequently, because of these dissimilar perceptions, choice might be more difficult to predict.

Thus, the researcher found this theory is not appropriate for this study, as the fear of losses and thinking in the negative outcomes, which leads to increase the cost is inconsistent with TQM implementation.

3.1.3 Bayesianism Theory

The name of this theory derives from Thomas Bayes, 1702-1761, who provided much of the mathematical foundation for modern probabilistic inference. The principals of this theory summarised in four (Berger, 2013, David and Whitman, 1996, Hewson et al., 2015); *the first one*, the Bayesian subject has a coherent set of probabilistic beliefs. Coherent is meant formally coherent with the mathematical laws of probability. *Second*, the Bayesian subject has a complete set of probabilistic beliefs, which means for each proposition assigns a subjective probability. *Third*, when exposed to new evidence, the Bayesian subject changes the beliefs in accordance with a conditional probability. *Finally*, Bayesianism states that the rational agent chooses the option with the highest expected utility.

The theory is a mathematical framework, and emphasize the potential gain or loss associated with the outcomes of actions and both emphasize the constraints on action introduced by uncertainty (Milner and Goodale, 2003, Zhang and Maloney, 2010). The theory is not appropriate for this study, as this study not looking for the loose or profits, in addition, using the mathematical methods in this study will not help to understand in depth the influence of the decision-making on the TQM implementation. Thus, this theory has been rejected in this study.

3.1.4 Satisficing Theory

Simon (1956) advanced the concept of bounded rationality where the decision-maker has limited information, time and intellectual ability to make decision. Instead the decision maker work with limited and simplified knowledge, to reach acceptable compromise choices (Satisficing), rather than pursue maximising or optimising strategies in which one

particular objective is fully achieved (Marshall, 1998). The word satisficing goes contrary to the notion of optimisation. According to Simon, optimisation does not exist in real world; instead, there is *good enough* alternatives.

The search for the best solution may be identified and one will not wait for eternity hoping to find a solution that just fits and completely covers all the areas. It establishes that more information searched lead for higher cost, but cost minimisation is limited up to the point of discovery of a compromise (Oliveira, 2007).

In this theory, the standard and parameters to be met for the problem of choice are set, and then the first solution that comes along and that emanates the qualities as detailed by the parameters is selected (Ahmed et al., 2014). Choosing this theory is more appropriate for this study that in addition to what was mentioned above, this theory is combined between two words: “*Satisfy*” and “*Suffice*”, as people in many different situation seek something that is good enough, something that is satisfactory, which achieves the satisfy and suffice at the same time. Understanding these two words help administrative to make decisions with relatively simple rules of thumb that do not make impossible demands upon his capacity for thought (Simon, 1972). This is line with what the TQM implementation is looking for, especially with the context of the public and private sectors, as the satisfactory between these two sectors are different within the bounded of cognitive limits, and then the comparison between these two sectors are applicable regarding that. Thus, the researcher decided to choose this theory to apply in his study.

The next subsections will discuss more models according to this theory, and justified which one is applied in this study.

3.1.4.1 Candidate Decision-making Models

Decision-making is a daily activity for any human being. There is no exception about that. Assumption is an essential distinguishing feature of the classical outcome which is consider as the elements of the decision such as the alternatives and the outcomes depend on different states (Sadler-Smith and Burke-Smalley, 2015).

Classical theories of choice in organisation emphasise decision-making as the making of rational choices based on expectations about consequences of action from the objectives. The instruments to make these choices is organisational forms (March and Olsen, 1986). Simon (1988, p.48) stated, “*The classical theory is a theory of a man choosing fixed and known alternatives, to each of which is attached known consequences. But when*

perception and cognition intervene between the decision-maker and his objective environment this model no longer proves adequate. We need a description of the choice process that recognises that alternatives are not given but must be sought; and a description that takes into account the arduous task of determining what consequences will follow on each alternative". Simon's process model of decision-making has inspired many authors and has led to develop many similar models. Simon (1960) distinguished three phases of decision-making, which were; intelligence phase, design phase and choice phase, see Figure 3.1 below.

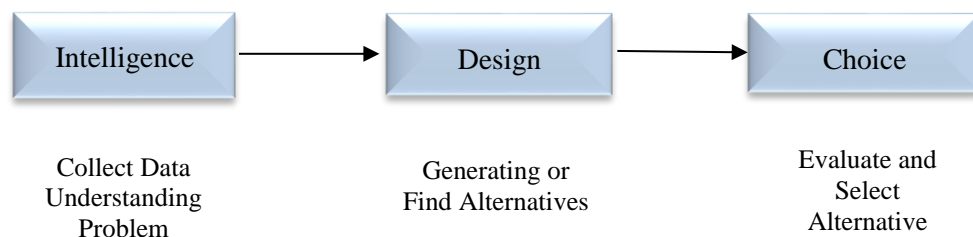


Figure 3.1 Decision- Making Process (Source: Adapted from Simon, 1960)

March and Simon (1993) revealed that decision makers normally choose a satisfactory decision instead of the optimal one, as there is not enough time to make an optimal decision. Furthermore, there are different factors, which could influence on decision makers to make a decision, such as; psychological influences, which contains personality, ability, experience and knowledge, in addition to sociological influences like, groups and organisations goals.

Simon's model considers as one of the most famous model and others authors are adapted it, but the problem with this model, it does not go beyond a choice phase, as there is no implementation phase, or feedback from the decision results, while it is important to know if the decision was right or not.

March *et al.* (1972) revealed to the garbage can model (Figure 3.2), which proposed that decision makers may start from the solution point instead of the problem point, as managers may propose solution to problem does not exist, the solution already available and managers try to found this solution could fit with other problems (Lieberman, 2013).

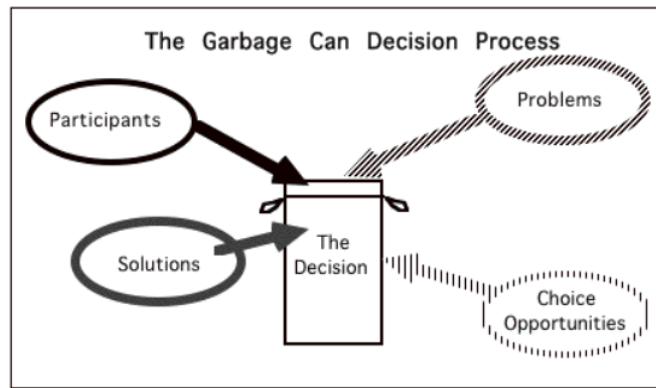


Figure 3.2 The Garbage Can Model (Source: Adapted from March et al., 1972)

The problem with this theory it deals with predictable situation, as there is no specific steps to follow or there is no standards for it, it is all depends on the managers and how they deal with problems. Furthermore, managers do not know what they want until some ideas of what they can get appears. This kind of theory it is hard implement in public and private sector similar, as there are no specific process to follow, because of that the authors exclude it from the study.

Slade (1992) revealed to model contains the same three phases but he added generate new alternatives in addition to the one which is already was choose, as a second choice if the first one does not achieve organisations goals (figure 3.3). In this model, there is no implementation and review phase, which means similar to Simon's model. That is why the researcher excluded this model.

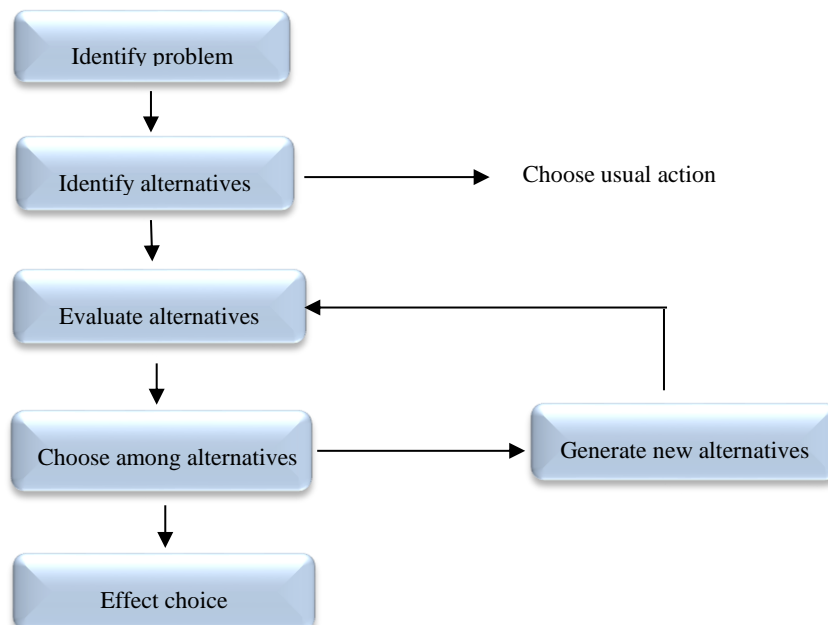


Figure 3.3 Slade's Decision-making Model (Source: Adapted from Simon, 1992)

3.2 The Rationale for choosing the decision-making process

Based on the previous decision-making theories, several authors adopted it and concluded to different numbers of decision-making steps. Some authors divided these steps to five, six, seven, and even eight steps. The researcher found that some steps were already included into another, such as analysis the alternatives and choose between the alternatives as some authors revealed that when decision makers choose between alternatives should analyse these alternatives first and assumed which outcomes could get (Cooke, 1991, Gregory *et al.*, 2012, Ingram, 2015). While other authors concluded to the possibility of incorporating two steps to be one-step like monitor and evaluate (Cooper and Boyko, 2010, Taylor, 2013), or evaluate alternatives and choose among them like in Slade's model.

All models were indicated to the same basic ideas, which were; problem finding, problem formulation, alternative generation, evaluate outcomes, choice, implement and finally evaluate which considered as a fourth phase for decision-making. As, make a decision without evaluate the results might lead for organisations failed. Thus, the decision-making steps which are the author adapted it are; identify the decision to be made, gather information, identify the alternatives, choosing from the alternatives, take action and monitor and evaluate. As these steps, cover the whole process for decision-making (Gregory *et al.*, 2012, Hummel *et al.*, 2014, Stockall and Dennis, 2015). These six steps contains the 4 phases for decision making, intelligence phase (steps 1 and 2), choice phase (steps 3 and 4), implementation phase (step 5) and review phase (steps 6 and 1). Furthermore, these steps looking exactly to what the implement TQM is looking for, as making a decision need to check the result of this decision in order to check if it is meet the quality requirement or not. The figure 3.4 below shows these processes.

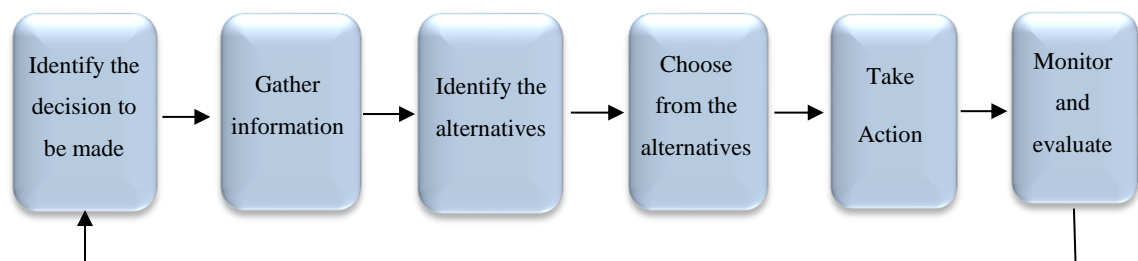


Figure 3.4 The Decision-making Process

The next subsections will explain these steps further:

3.2.1 Identify the decision to be made (ID)

The first step is to determine the problem or the issue that is needed to be discussed in the decision-making process. While some problems seem to be obvious and can be easily highlighted, others are complex and involve multiple factors. If there is no clear vision about the problem, tools like cause and effect can be used, which allows decision-makers to identify the real causes behind specific problems. There are some questions should ask when we come to identifying the purpose of the decision; (Gregory *et al.*, 2012, Hummel *et al.*, 2014, Ingram, 2015)

- What exactly is the problem?
- Why should the problem be solving?
- Whom are the affected of the problems?
- Does the problem have a deadline or a specific time?
- What level and kind of consultation will be appropriate?

3.2.2 Gathering Information (GI)

Most decisions require collecting relevant information so that make decision based on facts and data. This requires making a value judgment, determining what information is relevant to the decision at hand, along with how can get it. Some information must be sought from within yourself through a process of self-assessment; other information must be requested from outside yourself- from books, people, and a variety of another step, therefore, involves both internal and external work. In addition, in order to make the right decision, enough information should be available about the problem. The information allows decision-makers to identify the different sides of the problem and contribute to learning more about it. Tools such as brainstorming and mind mapping allow teams to build a visual presentation of the problem, resulting in a better decision-making process (Cooke, 1991, Elmansy, 2015, Gregory *et al.*, 2012, Taylor, 2013).

This step is meeting with the TQM implementation requirements, as staff supposed to participate in the decision-making process, so, when staff share in gather the required information that's mean they involved in this process.

3.2.3 Identify the alternatives (I Alt)

Through the process of collecting information, probably will identify several possible paths of action or alternatives. In addition to using imagination and information to construct new alternatives. In this step of the decision-making process, should list all feasible and desirable options (Gregory *et al.*, 2012, Jennings, 1994, Stockall and Dennis, 2015). Gregory *et al.* (2012) added that alternatives usually are complex to set, and most of the time need to be created rather than just discovered. Furthermore, alternatives should reflect substantially different approaches to a problem and that is happened based on different priorities across the organisation objectives.

3.2.4 Choosing from the alternatives (C Alt)

Once the organisation management identified the decision alternatives, and there is a clear understanding of these different options. Then, it is ready to choose which alternative seems to be best suited to implement and be more efficient than others to achieve the final goal. In addition, to the ability of pick a combination of alternatives (Elmansy, 2015, Gregory *et al.*, 2012, Hofmann, 2015, Taylor, 2013). Methods for making choices should allow participants to state their preferences for different alternatives based on the information they have and the estimated consequences (Gregory *et al.*, 2012). Moreover, an option which is taken by decision makers will be evaluated in the next step, stakeholders should be consulted regarding this option and should give feedback where that possible, in addition to devise a time scale for implementing this option (Cooper and Boyko, 2010).

In this step, employees are allowed to share in decision-making process, as they can state their preferences in order to choose best alternatives, and one of the TQM implementation factor is staff involvement, as the staff should be part of the decision-making process.

3.2.5 Taking Action (TA)

In this step, the organisation should take some affirmative action to begin to implement the alternative, which already have been chosen in the previous step. Before applying the solution, the team should be prepared to understand and use it. In this step, a further meeting with the team can help them learn more about the action, why it is adopted, and how to embed it in the process (Elmansy, 2015, Sadler-Smith and Burke-Smalley, 2015, Shapira, 2002, Taylor, 2013).

TQM implementation encourage employees to be part of the decision-making process, so, when staff involved in this process and they can take action regarding that they will be more willing to accept implement this decision.

3.2.6 Monitor and Evaluate (M&E)

In the last step, the organisation should experience the results of the decision was made before and assess whether or not it has solved the need in step one. The feedback is also helpful in the ongoing decision-making process because it may be used in step two (gather information) as part of collected information for the next decision-making process, or if the current decision has not resolved the identified need, then we may repeat certain steps of the process in order to make a new decision (Elmansy, 2015, Gregory *et al.*, 2012, Ingram, 2015, Shapira, 2002). This point of view was supported by Chen *et al.* (2013) who indicated that when performance does not reach the standard that is mean the problem must be redefined again to ensure the quality of the decision. Furthermore, Cooper and Boyko (2010) indicated that organisations should create a group to monitor and evaluate the decision, this group communicates with stakeholders to inform them about the benefits from the implementation via reports, which is helped to decide to keep going in implementation or choose another option to implement.

Monitoring and evaluating the implementation of the decisions are consistent with what the TQM implementation looking for, as this step try to check implement a specific decision will achieve the required results and quality; however, if this decision failed to achieve that, so, the organisation can choose another alternative' decision to get the required results.

The decision-making process contained six steps to make a decision, these steps supposed to be implement in any sector to get an effective decision. However, depends on the centralisation and decentralisation of decision-making, these steps implement differentially based on the sector, which is working in. This study will explore this further in the fieldwork chapter.

3.3 TQM implementation factors and Decision-making process

All staff members are supposed to be responsible for TQM implementation and they should know their responsibility for it. This responsibility makes them share ideas and decision-making (Adeoti, 2011, Ah-Teck and Starr, 2014, Arsić *et al.*, 2012, Arumugam

et al., 2009a, Azizi, 2015, Irfan *et al.*, 2014, Sabet *et al.*, 2012, Talib *et al.*, 2011a). This section will discuss how decision-making influence the TQM implementation and addresses how decision-making influence each of the TQM implementation CSFs identified earlier.

3.3.1 Senior Management Commitment (SMC) and Decision-making process

Decision-making is such a key management function, it follows that quality in management is not possible without quality in decision-making (de Klerk, 1994a). Quality in decision-making calls for a change in individual behaviour by managers. Like any other process that contributes to quality in an enterprise, management must plan for and control the quality of decision-making (Chen *et al.*, 2013). This means, as Gregory *et al.* (2012) indicated, that managers should:

- Know how they should be making decisions
- Be able to determine to what degree they are conforming to this requirement
- Have the ability and the authority to take a regular action.

TQM does not call for quality in decisions by top management alone, but by everybody in the organisation. After equipping themselves with training and tools in this regard, management should install the process and environment for quality decisions in the rest of the organisation (Crosier, 1990). While Arsić *et al.* (2012) indicated that, to introduce decision, there needs to be a commitment from senior management, as commitment and confidence from senior management are very important for organisational achievement.

There are multiple reasons to utilise decision-making in the organisation. First, as a result of complex organisational structures, decision-making as a process involves the participation of multiple levels and various stakeholders within the organisation (Rossiter and Lilen, 1994). Furthermore, the organisation is challenged, not only with having an efficient and accurate decision-making process, but also dealing with the fast-paced nature of the entire process. Second, the decision-making process allows organisational members to gain ownership in a decision choice. Smith (2004) suggests that the nature of decision-making is based on a two aspect-problem structure and information flow. Thirdly, it reduces or removes the top-down management style and employee resistance to change (Draper and Ames, 2000). Finally, it presents a framework for regular organisational practice, as decision makers face ambiguous problems when there are

multiple paths to solve a problem and when it is hard to verify the correctness of possible solutions to make the decision (Prime and Price, 1999).

Ellen *et al.* (2014) indicated that SMC is a fundamental factor for decision-making, which helps to promote projects and organisations and encourages individuals to participate in the decision-making process. This point of view was supported by Reeves *et al.* (2012) who concluded that when there is a commitment from the leadership, there will be an enhancement in employees' trust and encouraging them to participate in decision-making, which is associated with increased job satisfaction.

Bashir (2015) indicated that decentralisation in decision-making helps to increase top management commitment and the quality of an organisation's services. While Meyer and Hammerschmid (2010) indicated that the commitment of the SM was not affected that much by centralised and decentralised systems, as they still have the power and the authority to make decisions. Alexander (2015) indicated that, in a centralised structure, organisations keep decision-making firmly at the top of the hierarchy, among most of the senior management; however, Zheng and Negenborn (2014) concluded that top management commitment is affected by top management involvement which, in turn, is affected by the financial performance, rather than which kind of system is used (centralised or decentralised).

In summary, SMC motivates employees to participate in the decision-making process. In addition, it is hard to implement an action in organisations and change the individuals' behaviours without a commitment from the senior management. Furthermore, the literature showed that, whether it is a centralised or decentralised system, the commitment of the senior management does not really affect. The commitment of the SM is important for the decision-making and for TQM implementation, and without this commitment, the implementation will be failed.

3.3.2 Staff Involvement and Decision-making process

Glassberg (2004) and Meiksans *et al.* (2015) studied the relationship between decision-making and job satisfaction. They concluded that, when there is staff involvement in decision-making processes and a culture of working as a team, this leads to improved decision quality and these decisions would be more acceptable to staff as they had participated in the making of them. Furthermore, when the staff participate in decision-making, this helps to create trust between the manager and employees, which contributes

to making them more willing to accept responsibility and deal with problems in an efficient way. Ceschi *et al.* (2014) revealed that there are a number of factors, which have a predictive effect on the performance of decision-making, two of which are teamwork and communication. It is believed that these factors affect decision-making processes in an indirect way; however, the study did not explain why these factors have an indirect effect. Ellen *et al.* (2014) indicated that poor communication methods between decision makers leads to under-utilisation of knowledge, which may lead to getting poor and ineffective outcomes.

Emamgholizadeh *et al.* (2011) examined the relationship between employees' empowerment and their participation in decision-making. The study concluded that, when employees participate in decision-making, there is a positive influence on the effectiveness of the organisation's performance. Reeves *et al.* (2012) argue that the positive effects of increased staff involvement in decision-making are increasing job satisfaction, reduced job stress, and intention to leave a job, and increased staff commitment. This point of view was supported by Lambert *et al.* (2009) who indicated that increased staff involvement in decision-making leads to increased satisfaction, productivity and also reduced psychological stress. Park and Deshon (2010) concluded that using teamwork to make a decision is better than an individual's decision, as teams use a large pool of information, which leads to the avoidance of mistakes and good opportunities for the staff to correct and learn from each other; however, De Dreu and Beersma (2010) indicated that working as a team in groups helps to improve the organisational performance and group confidence, but these effects are present only when task ambiguity is low, while when ambiguity is high, group confidence will negatively affect decision quality. de la Torre-Ruiz *et al.* (2014) revealed that decision-making within teamwork is an effective way to increase employees' satisfaction since employees' social needs might be addressed; however, working within a team simultaneously introduces social complexity for individuals, as it is not easy to agree with others to make a decision.

Maringe (2012) concluded that inclusiveness in decision-making decreases with the hierarchical level of the decision-making group, with just a small number of staff allowed to participate in decision-making processes at a high level. Conversely, when the hierarchical level of the decision-making group is lower, more staff will be allowed to be involved in decision-making processes; however, Alexander (2015) indicated that when

an organisation is working in a decentralised decision-making system this will give staff more authority to participate in decision-making processes, which is helpful in achieving organisation goals and a larger proportion of the staff will be involved in this process. Furthermore, Bouraoui and Lizarralde (2013) concluded that decentralised decisions optimise the efficiency of local management and offer appropriate distribution of responsibilities and the staff will be encouraged to be part of the process.

The literature shows that when there is staff involvement to make a decision, staff are more willing to accept and trust organisational decisions, as they are included in the decision-making process. In addition, teamwork has been shown to produce decisions, which are better than those made by individuals, due to sharing of information and greater opportunity of error-correction. Furthermore, decentralised systems give more opportunity for the distribution of responsibility among employees, which encourages them to feel as though they are a part of the organisation, and this is what the TQM implementation looking for based on the literature.

3.3.3 Training and Decision-making process

Cole (2002) stated that there are three benefits of training. The first is increased job satisfaction, secondly, improvement in the value of workers in the labour market; and finally, increase in staff skills to make decisions without any hesitation. This point of view was supported by Ceschi *et al.* (2014) who indicated that, when staff are empowered to make a decision, there is a need for training to reduce instances of decision-making hesitation. Lorains *et al.* (2013) also indicated that training helps decision makers to invest time more effectively, where it would normally be needed to make a decision.

Lingham *et al.* (2006) concluded that, if organisations do not support employee involvement in decision-making related to training and their own self-development, this might lead to unwillingness on the part of employees to participate. Hashim (2001) stated that training might be carried out for many reasons, including gathering information that helps decision makers to improve training processes and facilitating participants' job performance. Redman and Wilkinson (2009) supported this point of view as they indicated that training increased staff's ability to deal with the situation they are in and make good decisions leading to greater job satisfaction. In addition, one of the solutions which were offered by Terzic-Supic *et al.* (2015) to overcome difficulties in decision-making and manage the change process is improved training programmes.

Matías-Reche *et al.* (2008) indicated that in decentralised decision-making, training helps organisations to reduce the number of supervisors and managers, which leads to reduced costs. Furthermore, when employees intend to make a decision, they need data and facts, not just opinion or intuition. Training is considered the most effective way to acquire information and skills for the purpose of enabling decisions (Ellen *et al.*, 2014); however, de Klerk (1994b) indicated that it does not matter which sector organisations are working in, staff need training to be more qualified to make decisions regardless of the context. This is, however, more complicated in the case of centralised organisations, as staff may consider themselves to not need more training, especially if they have many years of experience.

It appears from the literature that training is an important factor, which lets staff know how to deal with different situations and to make decisions without hesitation. In addition, decentralised organisations are more interested in training than those, which are centralised, as training leads to a reduction in the number of the supervisors. This reduces the total costs. In addition, it is easier for decentralised organisations to encourage staff to enrol in training programmes.

3.3.4 Employee Empowerment and Decision-making process

Pun *et al.* (2001) indicated that empowerment is a process when employees take part in or share in managerial decision-making. Heracleous (1994) concluded that staff should be empowered to make decisions. This helps them to progress in their work and without this empowerment, it is impossible to achieve organisational goals. Glassberg (2004) found that, when staff have the authority to make a decision, they feel satisfied with their job, and this contributes to organisational effectiveness. This point of view was supported by Hamann (2013) who indicated that employee empowerment helps to improve organisational effectiveness and service quality. Moreover, Lamm *et al.* (2015) added that employees empowerment has positive implications for both organisation and employees.

Judith (2012) concluded that employee empowerment and sharing information and decision-making all leads to enhancing employees' organisational commitment. This is also supported by Liu *et al.* (2015) who indicated that, in a healthcare context, employee empowerment to make decisions creates an effective commitment to the organisation and this commitment enhances the relationship between employee participation in management decisions and the quality of patient care. Moreover, Men (2011) indicated

that, when employees are empowered, they feel more confident in achieving self-fulfillment, which helps them to trust in and achieve organisational goals and accept their mutual influence. This is also supported by Emmanuel and Damachi (2015) who suggested that leaders should consider that humans seek to be empowered to make a decision and this empowerment inspires them to reach and acknowledge their potential in life and society, which then leads to organisation growth.

Hajjar *et al.* (2012) concluded that an important aspect of empowerment is that staff from the local management are able to make individual decisions, although this is more likely to happen in democratic decentralised communities opposed to more centralised organisations. Furthermore, Alexander (2015) revealed that, in recent decades, empowerment in decentralised systems is often at a high level; however less empowerment causes less communication between staff and increases the chances of failure. Men (2011) revealed that a decentralised structure provides a better chance that the organisation will not need an external consultant to make a decision because managers and staff are accustomed to working autonomously.

The literature shows that when staff are empowered to make a decision, it fosters commitment, which helps with organisational growth. In addition, employee empowerment in recent decades is at a high level, especially in decentralised structures.

3.3.5 Continuous Improvement (CI) and Decision-making process

Decision-making is vital in the innovation process especially for the CI of an organisation. Using decision-making in the process will get a higher quality product at a lower cost (Levesque and Walker, 2007). Ah-Teck and Starr (2014) revealed that an informed educational decision is easy to reach if TQM is implemented, as an effective change happens when all stakeholders are rightfully engaged in decision-making processes.

Friday-Stroud and Sutterfield (2007) indicated that CI enhances the decision-making process in several steps, such as search for alternatives, comparison, and evaluation of the alternatives, choice from the alternatives and monitoring the results using continuous feedback. Michel (2007) and Saiti and Eliophotou-Menon (2009) concluded that employees keep looking for CI and search for alternative options and remain focused at the same time; however, Bhuiyan and Baghel (2005) found that CI programmes become an imperative in the decision-making process, as CI helps to improve managerial processes, product quality and reduces wasted time.

The literature shows that CI helps to identify and choose alternatives, in addition to monitoring and improving the decision's implementation and getting continuous feedback.

3.3.6 Communication and Decision-making process

Vahabi (2007) indicated that communication is one of the factors, which influences understanding, and poor communication may lead to organisational failure. In addition, it has been noted that organisations, especially in the healthcare sector, should exchange information where possible to assist decision-making. This point of view was supported by Ellen *et al.* (2014) who indicated that poor communication methods between decision makers lead to under-utilisation of knowledge, which leads to ineffectiveness and poor outcomes.

Michel (2007) stated that effective communication leads to having the ability to make good decisions and leads to rational approaches to solving problems. Furthermore, effective communication and a good understanding can explain why some teams have greater effectiveness than others (Bazarova and Hancock, 2012, Ceschi *et al.*, 2014). Wagenheim and Rood (2010) revealed that there is a relationship between communication channels and employee satisfaction, while Servaes (2009) showed that there is a link between communication and decision-making improvement; however, Alexander (2015) indicates that, when staff have more empowerment, which is a common feature of decentralised management in combination with the availability of information technology, there is an observed fall in the cost of communication.

Bouraoui and Lizarralde (2013) identify that when organisations have a non-stable work environment, one that has a high level of uncertainty, good communication channels between the local management and main departments are required helping to minimise the risk associated with decision outcomes. Saiti and Eliophotou-Menon (2009) concluded that, when organisations need to reach a decision in a large system such as an educational one, it requires the group to participate and communicate in this process at a group level rather than relying on an individual. This increases communication costs, especially if an organisation is working within the public sector.

It can be seen from the literature that communication leads to having the ability to make good decisions, in addition to enhancing staff understanding. Furthermore, communication in the centralised structure is more complicated than in a decentralised

one, as it requires large group from the local management and the main department, which increases the communication cost.

3.4 Issues from the literature review

- The previous studies on TQM implementation have not given enough attention to the decision-making influences.
- The CSFs of TQM implementation contained six factors; senior management commitment, staff involvement and teamwork, training, employees empowerment, continuous improvement and communication.
- Decision-making models by previous authors included six steps; starting with identifying the decision to be made and ending with monitoring and evaluating.
- Previous studies made comparisons between public and private sectors whether it is for TQM implementation or decision-making process, but not about decision-making influence on TQM implementation.

3.5 Rationale for the structure of the Theoretical Framework

The review of the literature in chapter two showed that TQM implementation has been widely studied. The previous studies included comparisons between public and private sectors regarding TQM implementation. On the same context, the previous studies did comparisons between centralised and decentralised decision-making. However, these studies had not given enough attention to the interactions between decision-making and TQM implementation, save for a few exceptions.

The first of these studies Sabur (2015) focuses on how TQM keeps organisations running smoothly and how they might attempt to maximise customer satisfaction through providing quality products/ services and quality in decision-making. The reason for the study was that many organisations previously believed that the costs associated with the introduction of TQM outweighed the benefits. The study depended on a theoretical approach on desk study by reviewing a related literature. The second study by Ah-Teck and Starr (2014) focused on how school leaders' use of data and evidence in making decisions for school improvement was based on the use of TQM. The paper brings new thinking to understanding the critical role of principals within the TQM scenario of data-driven decision-making. Akdere (2011) examined decision-making in organisations to understand how decision-making processes are used by the participants to achieve accurate and effective decisions as a part of quality management and systematic practice.

The paper provides a different decision-making process, which included; brainstorming, consultative decision-making, voting decision-making and consensus decision-making, and analyses the utility of decision-making process and their implications for quality management in organisations. Therefore, this study developed a framework, which linked the decision-making process and the CSFs of TQM implementation.

The theoretical framework of this study has been developed based on the decision-making process identified earlier in this chapter and the six CSFs of TQM implementation (from chapter two). The six factors have been addressed as being critical for the implementation of TQM based on previous research. These factors are SMC, SI and teamwork, training, EE, CI and communication. These factors are considered as the way to enhance TQM implementation as they are strongly supported by several studies (See section 2.5, p.23); however, the decision-making steps, which were considered as the main steps regarding the satisficing theory are : identify the decision to be made, gather information, identify the alternatives, choose from the alternatives, take action and monitor and evaluate.

The author structured the study framework based on centralised and decentralised decision-making and that to explore how and why the decision-making process influences the six CSFs of TQM implementation. The reason for the division of the theoretical framework into two parts is attributed to the author looking at both centralisation and decentralisation in decision-making. Public hospitals are working with a high level of centralisation in decision-making, while the private hospitals are working with a high level of decentralisation in decision-making. Thus, the public sector reflects the centralisation part of the framework, while the private hospital reflects the decentralisation part. The justification for the choice of the case studies hospitals has been addressed in the methodology chapter (section 4.4, p.76).

In line with section 3.2 (p. 51) the decision-making was set into the decision-making process, which starts with identifying the decision to be made and end with the monitoring and evaluation of the action, which is applied by the hospital management. In the case of centralisation, which in this case is the public sector, the decision steps do not belong to the hospital manager totally, as most of these steps belong to the governmental department. In other words, the government in the public sector tries to control everything by keeping a high level of centralisation in the decision-making steps. In the private sector, it is a different situation, as the hospital management have the right to decide for the completely decision-making process from the first step to the last one, which means

that in the private sector, the government has authorised the hospital management to work in a high level of decentralisation of decision-making.

The theoretical framework is divided into two parts, one for a centralised sector and the other one for a decentralised (see Figure 3.5). The researcher draw it as a clock, the CSFs placed as the numbers of this clock, and the decisions-making process is the clockwise, which can go in the two directions depends on which factor need to be consider. There are differences between the bounded rationality in the two cases, as it became less when try to reach monitor and evaluate the decision in the centralised case, and vice versa in the decentralised case. The researcher in this study looking to know how and why the decision-making process influence and shape the CSFs of TQM implementation and that is what the findings chapter will figured it out.

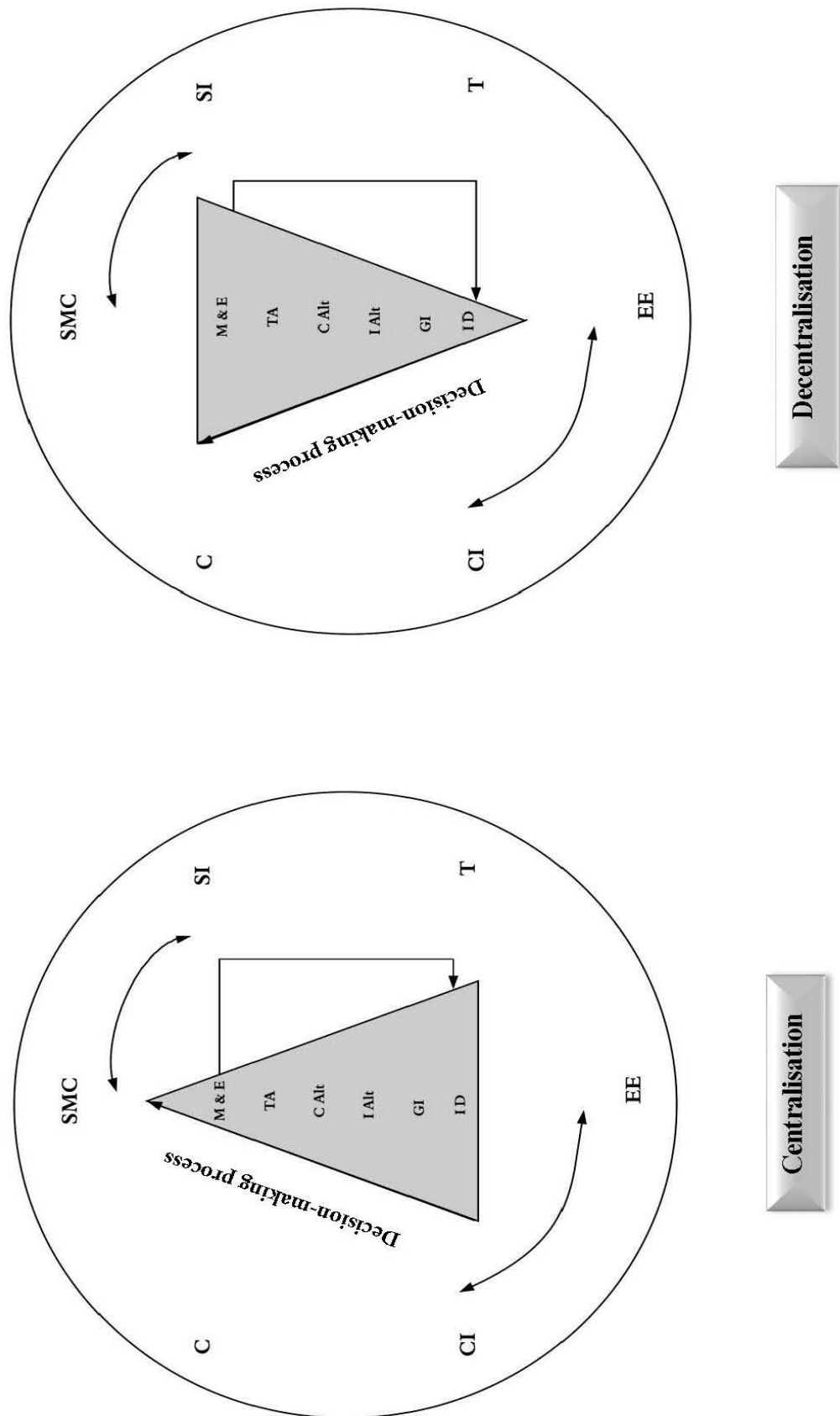


Figure 3.5 The Initial Research Framework of how the Decision-making shape the TQM Implementation Factors

3.6 Chapter summary

In this chapter and from the literature review some issues, which have emerged help the author to formulate a theoretical framework. This framework includes decision-making process and TQM implementation factors. The TQM implementation contains six CSFs; senior management commitment, teamwork, employee empowerment, continuous improvement, training and communication. The decision-making includes six steps, which were: Identify the decision to be made, gathering information, identify the alternatives, choosing from them, taking action and finally monitor and evaluate. The outcome of this chapter contributed to achieving the objective: *To critically review and synthesise the relevant literature on TQM implementation and decision-making.*

A review of the literature shows that the decision-making process influences the CSFs of TQM implementation. Thus the objective: *To identify how centralised or decentralised decision-making influence TQM implementation factors* has partly been achieved; however, the next chapter will discuss the research methodology.

Chapter Four

Research Methodology

Chapter 4 Research Methodology

4.0 Chapter Introduction

This chapter addressed the research methodology for this study. The contents of this chapter describe what was done, how it was done, and why it was done. For example, each choice made in methodology and methods were presented and what is the rationale for choosing it. The methodology is about “*how research should be undertaken, including the theoretical and philosophical assumption upon which research is based and the implications of these for the method or methods adopted*” (Saunders *et al.*, 2007, p.481). Hussey and Hussey (2003) and Taylor and Bogdan (1984) have emphasised that the research methodology be the collection of methods that the researcher used to collect and analysis the research data in order to answer the research questions. Antony *et al.* (2002) stated that the research methodology could guide the researcher to achieve the research objectives.

This chapter describes the research methodology that the researcher used to meet the research aim and objectives, and answer the research questions. It contains sections on research paradigms, research strategy choice, research design, preparation of data collection and methods for the analysis of case study data. The layout of the chapter is shown in figure 4.1.

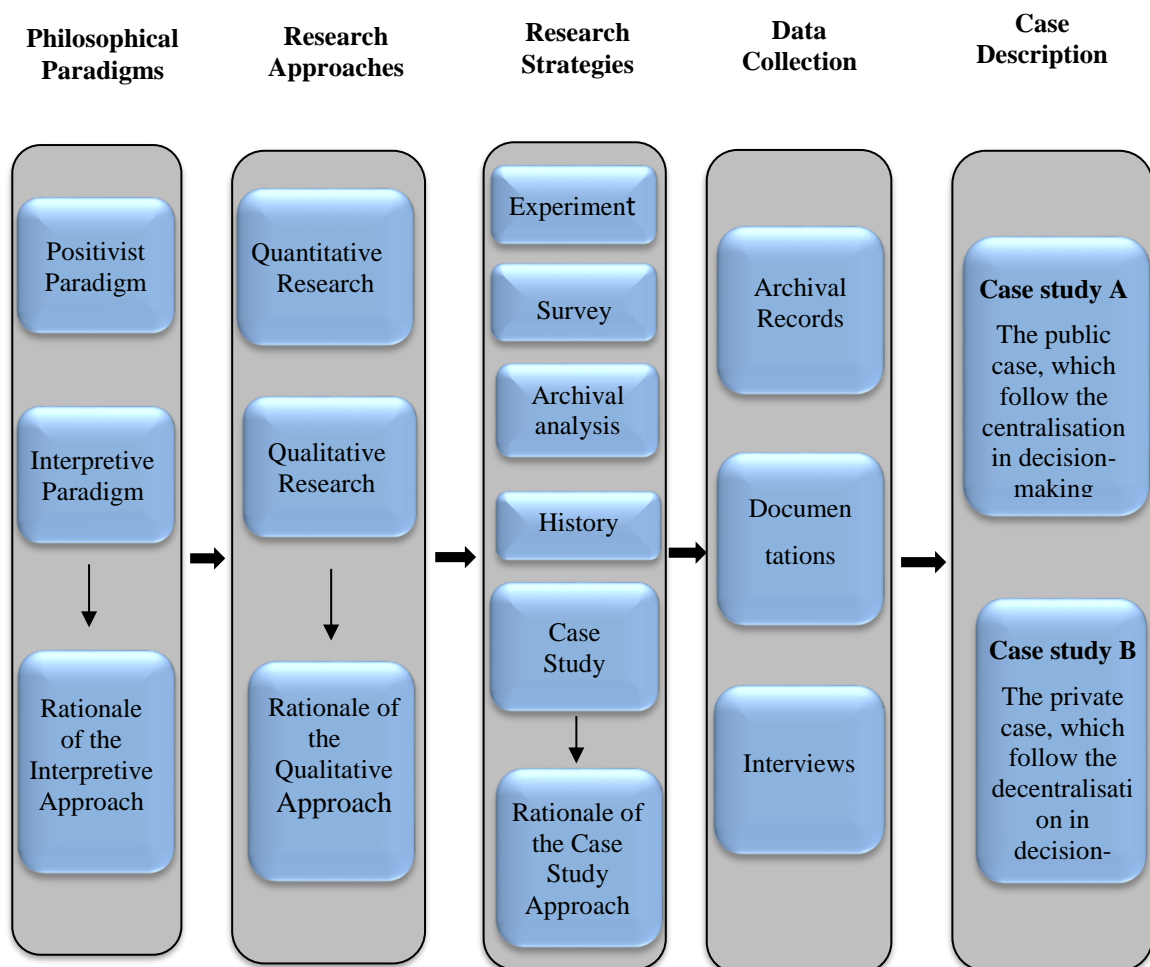


Figure 4.1 Overview of the Used Research Methodology

4.1 Philosophical Paradigms of the Research

Burrell and Morgan (1994) argue that researchers must select the proper paradigm for their study. In accordance to Saunders *et al.* (2003), selecting an appropriate paradigm to implement depends on the research questions and the research assumptions. Furthermore, Saunders *et al.* (2007) suggested that research philosophy promotes consideration as to how knowledge should be developed in order to answer the research question. The understanding of research philosophy can benefit the research design by clarifying research designs, selecting appropriate research designs and identifying or even creating and adapting new designs (Easterby-Smith *et al.*, 2012).

Carson *et al.* (2001) mentioned that the most common philosophical paradigm used in business research is a continuum between *positivist* (scientific) and *interpretivist* (relativist) philosophies. Saunders *et al.* (2007) also refer to these philosophies as

positivism and *interpretivism* and comprise views about developing and judging knowledge in order to accept that knowledge.

Therefore, by presenting the background of research philosophy, the next sections explain the rationale for choosing an appropriate paradigm, approach and methodology for this study.

4.1.1 Positivist Paradigm

According to Oates (2006), one of the oldest research paradigms is *positivism* also referred to as the scientific approach. The main characteristics of *positivism* are that the world is ordered and can be studied objectively. The *positivists* assume that as the reality is objective it can be described by quantifiable properties that are independent of the researcher and his tools. The *positivist* attempts to test theory in order to increase the predictive understanding of the phenomena (Myers, 2013).

In addition, Remenyi *et al.* (1998) defines the basic assumption in the *positivist* research as being that the researcher is independent and is neither affected nor affects the subject of the research. Furthermore, Oats (2006) assure that epistemologically, the positivist basic assumption is the belief that it is possible to collect data objectively and ontologically the researcher is assumed to be detached from the objects of his research.

The emphasis in *positivist* research is on the structured methodology to facilitate reproduction and quantifiable observation which then leads to statistical analysis (Nagpal *et al.*, 1997). Similarly, Neuman (1994) suggests that the *positivist* approach is characterised by repeatability, reductionism and refutability. In the positivist research knowledge is regarded as hypothetic-deductive i.e. a theory is formed and then evidence is used to either accept or reject it.

Chua (1986) points out that the empirical testing is two folds: a theory exists that is an independent set of observation statements that could be used to confirm or verify the truth of a theory but, these observation statements are theory dependent and fallible (Popper, 1972). In other words, a number of different experiments can produce the same results; therefore, the knowledge it generates can be generalised and applied in various settings.

Decision-making process and TQM implementation can be classified as positivist if there is evidence of formal proposition, variables that can be quantifiable, hypothesis testing, and the drawing of inferences about a phenomenon from the selected sample. The

positivist paradigm has been rejected due to its limitations when deal with the understanding of human behaviour and interaction among them in a specific setting, in which it is based upon their social beliefs i.e. subjectivity (Collis and Hussey, 2009). In addition, according to Healy and Perry (2000) taking the *positivist* approach tends to be insufficient when undertaking a study in particular areas, i.e. social science, due to the reason that social science studies appear to create more consistency with a social science orientation.

4.1.2 Interpretive Paradigm

The *interpretive* research is about how people view an object and the meaning they attribute to it. The aim of this research approach is not to test a hypothesis but to discover and describe the interaction between the various independent social factors (Rubin and Rubin, 2005). Furthermore, Braa and Vidgen (1999) mention that the *interpretive* research is concerned with obtaining consequential information from the various social interactions. Remenyi et al. (1998) mentioned that the *interpretive* paradigm is interested in discovering the reality of a situation and to explore the subjective meaning of people's actions motivating it.

In other words, the interpretive studies attempt to understand the phenomena through which people attribute the meaning to them (Orlikowski and Baroudi, 1991). The aim of the *interpretive* research is to increase our understanding of human thought and action through interpretation of the real life human actions (Myers, 2013).

In contrast, the research paradigm of this thesis places emphasis on an *interpretive* research, which gives importance to the pursuit of meaning and to understand the knowledge through the picture of a social construction. At the same time, it is also a way to gain insight and understanding into the actual social phenomenon of the investigation.

Typically, *interpretive* researchers begin with the assumption and seek for admittance to reality, either the given ones or socially constructed, and are done through social constructions such as language, consciousness, and shared meanings (Myers and Avison, 2002). Therefore, this thesis takes a path via an *interpretive* research with an attempt to understand the phenomena in order to identify the answers for each research question, while also aimed to produce an in-depth understanding of the context of the selected case study. Silvestro (2001) also stated that to understand the TQM implementation need to use the *interpretive* paradigm, as it helps more to understand the phenomena.

Collis and Hussey (2009) offer a comparison of the features of the two paradigms (see table 4.1).

Table 4.1 A comparison between Positivism and Interpretivism

Positivism (quantitative) tends to:	Interpretivism (qualitative) tends to:
Use large samples	Use small samples
Have an artificial location	Have a natural location
Be concerned with hypothesis testing	Be concerned with generating theories
Produce precise, objective, quantitative data	Produce rich, subjective, qualitative data
Produce results with high reliability but low validity	Produce findings with low reliability but high validity
Allow results to be generalised from the sample to the population	Allow findings to be generalised from one setting to another similar setting

Source: (Collis and Hussey, 2009, p.62)

Based on the characteristics of both philosophies and the nature of this research, by using the *interpretive* approach it allows the researcher to increase his understanding of how and why the decision-making process influence the TQM implementation factors in Iraqi hospitals. The *interpretive* approach provides a wider scope for the researcher to understand the real situation leading to answer the research questions.

4.2 Research Approaches

The research aims, objectives, and questions play a critical role in the selection of the research approach. Consequently, Oppenheim (2000) affirmed that choosing the best approach is a matter of appropriateness.

There are two main research approaches in social sciences, qualitative and quantitative (Yin, 1994). Qualitative research is based on in-depth information, and quantitative research on large amounts of numerical data that can be generalised (Hussey and Hussey, 2003). A third approach is a mixed method, which is combination of both qualitative and quantitative research (Creswell, 2013). A brief account of the various approaches is given as below:

4.2.1 Quantitative Research

The quantitative approach is based on the positivist view of the world in which all phenomena may be analysed scientifically and explained through appropriate scientific

analysis, and it has been the dominant tradition within the research community. This ideology of thought believes that social facts are there to be found and can be investigated (Crotty, 1998). Creswell (2013) clarified the quantitative research method, which means testing objective theories by examining the relationship among variables. These variables can be measured on instruments so that numbered data can be analysed using statistical procedures. This approach emphasizes numbers, which come to represent values and levels of theoretical constructs, and concepts, which are viewed as strong scientific evidence. Some of the most common quantitative methods according to Myers and Avison (2002) are: survey methods, laboratory experiments and numerical methods such as mathematical modelling. However, these methods cannot be implemented in this research, as there is no large number of staff who could involve in this study, as there are very small number of staff who already know about the TQM and have authority to make decision regarding it. Laboratory experiments is not applicable in this study, as the researcher has no control over the staff behaviour. So, this approach been rejected in this study.

4.2.2 Qualitative Research

According to Rudestam and Newton (2001), in qualitative research the researcher will be more flexible in exploring phenomena in their natural environment, rather than being restricted to a relatively narrow band of behaviour. A qualitative approach implies that the data are in the form of words as opposed to numbers; these data are normally minimised to themes and categories and then evaluated subjectively. Taylor and Bogdan (1984) stated that there is more emphasis on description and discovery and less on hypothesis-testing and verification. They add that qualitative researchers seek in-depth understanding of the individual and would argue that experimental and quasi-experimental methods could not achieve the full description of the phenomena. Similarly, Leedy (1993) mentioned that when the data is verbal, the methodology is qualitative. In his comments on qualitative research, Tombs (1995, p.8) stated that “*qualitative researchers see themselves as producing data which is rich and deep, in contrast to what they consider to be the more superficial products of quantitative research*”. Myers (2009) believes that the qualitative research approach enables researchers to study social and cultural phenomena. The qualitative research methodology helps the researcher to understand the context within which the participants live whereas the data is a record of what the people have understood.

Therefore, a qualitative research approach is suitable keeping in view the nature of the current research study. The qualitative research is selected because this research study intends to understand how and why the decision-making process influence the TQM implementation in Iraqi hospitals. The main reason for the selection of qualitative approach is ability of the qualitative data to provide a broader and richer description enabling a better understanding from multiple perspective. The mentioned reasons are enough to choose a qualitative approach (Hoepft, 1997).

4.3 Choice of Research Strategy

The choice of the right research strategy is clearly fundamental to any piece of research. This section will explain the reasons why the case study strategy is appropriate for this study.

Yin (2014) argues that there are three main purposes of research; exploratory, descriptive or explanatory and five main research strategies; experiment, survey, archival analysis, history and case study. Then he goes on to describe three conditions that need to be considered for the most appropriate strategy to be employed. These conditions are:

- a) The type of research question posed, method
- b) The extent of control an investigator has over actual behavioural events; and
- c) The degree of focus on contemporary events, not historical ones.

Yin (2014, p.9) provides a table (Table 4.2) to aid in selecting the most appropriate research strategy:

Table 4.2 Relevant Situations for Different Research Strategies

Method	Form of Research Question	Requires Control of Behavioural Events	Focuses on Contemporary Events
Experiment	How, why?	Yes	Yes
Survey	Who, what, where, how many, how much?	No	Yes
Archival analysis	Who, what, where, how many, how much?	No	Yes/No
History	How, why?	No	No
Case study	How, why?	No	Yes

The three conditions listed above will be discussed in order to justify the research strategy.

a) The type of research questions which are posed:

The research questions forms as stated in Yin (2014) are; how, why, who, what, where, how many, how much. The first research question for this research is: *“How does centralised and decentralised decision-making influence TQM implementation factors?”*. The second question is: *“why does centralised and decentralised decision-making influence TQM implementation factors?”*. Clearly then this research is posing how and why questions. According to Yin (2014), the types of strategy that are best for answering how and why questions are experiment, history and case study.

b) The extent of control an investigator has over actual behavioural events

The researcher of this thesis has no control over the behavioural events that took place in the hospitals, which are trying to implement TQM, so the possibility of using the experimental strategy is removed. This leaves just two choices either the historical or case study strategies.

c) The degree of focus on contemporary events, not historical ones.

The focus of this research is on contemporary events rather than historical events. The historical strategy is not the appropriate strategy. Yin (2014) argues that the historical strategy is dealing with the dead past when no relevant persons are alive to report what happened and when.

Thus, the case study strategy is the most appropriate research strategy for this study as for how and why questions are being asked about contemporary events, and the researcher has no control over it.

Yin (2014, p.16) states that:

"A case study is an empirical inquiry that

- Investigates a contemporary phenomenon (the “case”) in depth and within its real-world context, especially when*
- The boundaries between phenomenon and context may not be clearly evident.*

In other words, you would want to do case study research because you want to understand a real-world case and assume that such an understanding is likely to involve important contextual conditions pertinent to your phenomena of case”.

Stake (1995) argues that cases are opportunities to study phenomena. Hussey and Hussey (2003) supported Stake's view by describing a case study as an extensive checking of a single instance of a phenomenon of interest and argue that anything occurring in the context of the phenomenon is fundamental. Denscombe (2003) adds that one of the strengths of the case study strategy is that it allows the researcher to use a variety of sources and a variety of types of data as part of the investigation.

Anne Bardoel and Sohal (1999) observed that using case study to explore TQM issues is the best method. They pointed to two studies in which it was found that the case study approach had been especially applicable to evaluating the implementation of TQM. These studies show that this methodology provided details that were missing from other methods like a survey. Silvestro (2001) also stated that case study is the most appropriate method for TQM studies.

Thus, the case study strategy is the most appropriate research strategy for this study.

4.4 Justifications for Choice of Case Studies

Based on the theoretical framework in chapter 3 (p.65), this study were be applied in Iraqi hospitals, one from the public sector, and one from the private sector. These case studies hospitals are Basra General Hospital and Almoosawi Private Hospital. They were selected in order to explore how centralisation and decentralisation of decision-making influence TQM implementation. The public hospital is following centralisation in decision-making, however, the private hospital following decentralisation in decision-making. The justification for choosing these particular case study hospitals is summarised below:

Case study A is the largest and oldest public hospital in Basra, which is following a centralisation process in making a decision and that what the author is looking for. It is one of the first hospitals who started to implement TQM in Basra in early part of 2013. In addition, Basra General Hospital was the first hospital in Basra city, which was chosen by the Basra health Directorate to have a presentation about TQM implementation benefits. The hospital established in 1917, this hospital serves the Basra community and the Arabic Gulf community. The hospital's patient capacity is 870 patients in different specialisms. There are plans now to develop the hospital to be a medical city, and that will make it the first one in the south of Iraq.

Case study B is the largest private hospital in Basra and was established in 2000. Basra health Directorate considers this hospital as the main private hospital in Basra, as it the

biggest private hospital in Basra, and it is the first one which is started to implement TQM. In addition, it is a private hospital and that is mean it is following decentralisation process in making a decision, and that exactly what the author is looking for because of that that the author decided to choose it. This hospital has been supplied with the most modern medical equipment, furniture and all the essential accessories. The hospital started the delivery of health and medical services on the 5th January 2005 as soon as it gained the green light from the Ministry of Health to practice on 25th December 2004. The hospital started to implement TQM as soon as the governmental department decided that. Then, the hospital gained ISO 9001 certification in 2015.

4.5 Preparation for Data Collection

Yin (2014) advises that the preparation for doing a case study include the development of a case study protocol, assessment of the prior skills of the investigator, training, and preparation for the specific case study and data collection instruments.

4.5.1 Protocol Development

A case study protocol is more than the data instrument. The protocol contains the instrument and also the general rules and procedures, which are supposed to be followed in using the instrument. A case study protocol is fundamental when using a multiple-case study design, as the protocol is a major tactic in increasing the reliability of case study research (Yin, 2014). According to Yin (2014), the protocol should include:

- An overview of the case study project, including the research questions. As there is only a single investigator in this study (the author), it is unnecessary to go into the whole details which contain:
 - Gaining access to the organisations, interviewees and documents as sources of information.
 - Activities schedule, e.g. document retrieval, interviews.
 - Agreement to record the interviews.
 - The information provided to the interviewees before the interviews.
 - Procedures for recording, transcription and verification of interviews.
 - Procedures for document filing and storage.
- Case study questions:

- The specific questions to sustain in mind when collecting data in the field to keep the investigator on track as the data collection proceeds.
- A list of probable sources of evidence for each question.
- Guide for the case study report, e.g. the format and which documents the report could contain.

The guide for the case study report helps to ensure the relevant data is collected and reduces the possibility of needing to revisit the case study place for more information.

4.5.2 Principles of Evidence and Data Collection

Oppenheim (1992) describes research methods as those used for gathering data. Methods are what the researchers use in order to explore, define, understand and describe phenomena, and to analyse the relationships among their elements; they are the ways of collecting evidence during data gathering (El-Khatib, 1992). Yin suggests six major sources of evidence to be used in the case study approach. These sources of evidence are documentation, archival records, interviews, direct observation, participant-observation, and physical artefacts (Yin, 2014). Instead, the use of multiple sources of evidence can help in clarifying the real meaning of the phenomena, which are studied. Furthermore, a multi-methods approach helps the researcher to overcome the possibility of bias associated with any single method (Collis and Hussey, 2009). Golafshani (2003) mentioned that the use of multiple source of evidence help substantially in improving validity and enhance the reliability of the research. The sources that have been used in this study are:

4.5.2.1 Documentation

Yin (2014) suggests that a variety of documents could be available to the case study investigator, such as:

- Letters, memoranda, and another communiqué.
- Agendas, announcements and other written reports.
- Formal studies
- Administrative documents, progress reports, and other internal documents.

Mason (2004) describes the study of documentation as a research method that many qualitative researchers consider meaningful and useful in the context of their research strategy. Silvestro (2001) used case study documents to corroborate the interviews in his

case studies of TQM implementation. Yin (2014) stated that documentary information is likely to be relevant to every case study topic. To obtain reliable data, documentary evidence (Board meetings notes and formal letters) being used in this study to increase the reliability of the data produced from the interviews.

4.5.2.2 Archival Records

Yin (2014) noted that archival records are relevant in many case studies. These contain organisational and personal records, maps and charts, lists of names and other relevant items, and survey data. The researcher examined records showing the history of the hospital, their establishment, and structure, to provide part of the background to the case study hospitals. Therefore, this method is appropriate to be used in this study.

4.5.2.3 Interviews

Yin (2014) stated that interviews are one of the most important sources of information in case studies. He added that interviews are a fundamental source of case study evidence because most case studies are about human feelings or human affairs and these affairs should be interpreted by face-to-face meetings. The interview is claimed to be the best method of gathering information (Easterby-Smith *et al.*, 2012). Yin (2014) indicated that interviews could gather the facts of matter.

In addition, using the interview as a data collection instrument has many advantages, such as:

- Increased certainty. The direct communication between interviewer and interviewee allows the scholar to explain the objective of the research more easily and to explain doubts or to avoid any confusion of the concept or questions (Sekaran, 2003).
- It permits the scholar to enquire about more complex questions and it considers non-verbal communication, such as feelings, behaviour, attitudes, and the facial expression of the interviewees. Thus, it might permit a higher degree of similarity in the responses than some other methods (Hussey and Hussey, 2003).

Patton (2002) indicated that interviews are one of qualitative research methods, which are used to get data in depth. This point of view was supported by Sekaran (2003) and Oppenheim (2000) who have mentioned that interviews help researchers to understand people activities in depth and avoid any misunderstanding.

Thus, interviews are the most appropriate method for this research as the research objectives looking to identify how and why centralisation and decentralisation of decision making influence TQM implementation, and interviews help to achieve that in depth.

4.5.2.3.1 Justification for Choosing Semi-Structured Interviews

The use, in this study, of the semi-structured interview as part of a qualitative approach and case study strategy, is supported by many contributions in the literature, including that of Ghauri and Granhauge (2005, p. 86) who note that “*qualitative methods use relatively more qualitative techniques, such as conversation and in-depth semi-structured interviews.*” This point of view is shared by Patton (2002), who suggests that the data in qualitative research might include transcripts of in-depth interviews, direct observations, or document review. Of particular relevance to the present research are the assertions of Sekaran (2003) and Oppenheim (2000) that in-depth interviews can help researchers to understand the connotations of people’s activities and that this allows the researcher to explain the purpose of the study and to clarify any doubt or avoid any misunderstanding. In contrast to an unstructured or conversational approach, a number of pre-determined questions have to be explored, rather than leaving the respondents to talk generally about the research problem.

The semi-structured interview is the most appropriate method for this research, since the aim is to explore how the centralisation and decentralisation of decision-making influence TQM implementation in Iraqi hospitals. This choice is supported by researchers such as Yates (2004), who consider that the interview is a good way of exploring participants’ subjective meanings. The interviewer can tailor questions to the ongoing concerns of the participants, who can talk about things the interviewer might not have thought about before; this may be of particular benefit to the study.

Saunders *et al.* (2009) also argue that semi-structured and in-depth interviews are used in qualitative research not only to reveal and understand the ‘what’ and ‘how’, but also to place more emphasis on explaining the ‘why’. The present research focuses on words rather than numbers, on interactions and behaviour, on people’s experiences and attitudes.

Since it is sometimes complicated to deal with sociological analysis, it seems that the interview method is suitable for application to this study. Finally, Hakim (2000) holds that in-depth interviews can also reveal the reasons for any discrepancy between stated attitudes and actual behaviour.

Based on the above discussion, the researcher used face-to-face interviews as the main source of data; and documentation and archival records as secondary sources of evidence.

4.6 Triangulation: Rationale for using multiple sources of evidence

The rationale for using multiple source of evidence in a case study is known as triangulation. Multiple source of evidence help in developing converging lines of inquiry following a corroboratory model (Yin, 2014). Hussey and Hussey (2003) states that triangulation serves to clarify meaning by identifying different ways the phenomenon is being seen. Ridder (2016) agree with this view and recommend that it is best to combine data collection methods. Denzin (see Hussey & Hussey, 2003, p.74) defines triangulation as *"The combination of methodologies in the study of the same phenomenon"*.

Figure 4.2 describes the effect of this triangulation of data sources using the data sources accessed in this study.

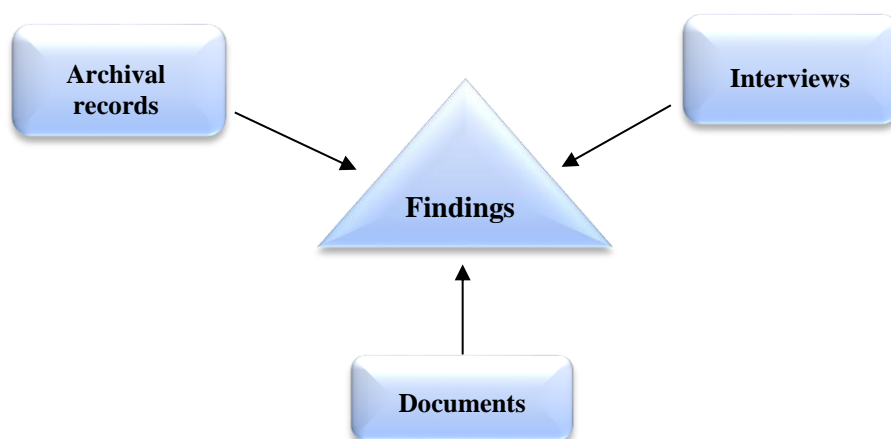


Figure 4.2 Convergence of Multiple Sources of Evidence (adapted from Yin 2014, p.121)

The archival records and documentations: helped the researcher to justify why the case studies have been chosen, as its provided the researcher with the hospitals backgrounds, hospitals organisational structures, when was the implementation of TQM started and how it's started.

Interviews and documentation: the documentation helped the researcher to confirm and validate the interviewees' responses, which means it plays a complementation role to the interviews.

4.7 Structure of the Interview Protocol

This section describes the interview process such as; generating and developing the interview questions and translating the interview questions.

4.7.1 Generating and Developing the Interview Questions

The interview questions are the main source to gather the related data to achieve the study's aim and objectives. The researcher has generated and developed questions concerning the decision-making steps and the TQM implementation factors from the theoretical framework chapter 3 (p. 55), for the interview questions (See Appendix 2). The literature review was the main source for the interview questions. In addition, discussing these questions with Professor John Davies who is an expert in the TQM area and this discussion strength the validity and ensure the study key areas were covered.

The researcher also took into account Collis and Hussey's (2009) techniques regarding the language that is used in the interview questions, like start the questions with how, why, what and where. Reading what has done in similar research studies. Using open-ended questions without reference to the literature or theory, unless otherwise dictated by the research design.

4.7.2 Preparing the Interview Protocol

A number of steps had been followed before conducting the case study interviews. The first step was establishing the interview questions (Appendices 2 & 3); the main source was the literature review. The second step was discussing these questions in addition to data protection protocol (Appendix 1) with Professor John Davies who is an expert in the TQM subject and qualitative methodology. Furthermore, questions techniques were used, such as starting questions by how, why, what and where. This kind of questions let the interviewees explained them responses in depth, and that is what the researcher need to know in his study.

4.7.3 Selection of Interviewees

The next step, after discussion with the supervisor, was to make decisions about whom to involve in this study. To do that, the researcher contacted the Basra Health Directorate, the hospitals' managers and quality committee managers to discuss with them who from the staff would be suitable of answering the interview questions. The criteria for the suitability were only a few individuals who were suitable to answer the questions regarding the TQM implementation and had the authority to make decisions at the same time. They provided the researcher with a list of staff's name, and positions for the people who would be appropriate do the interviews. The Basra Health Directorate's and the hospital managers' lists were almost similar. Those people were hospital managers, hospital board members, managers and members of the quality committees. When the researcher went to the hospitals to do the interviews, he discovered that not all of the board members and quality committee members had knowledge about TQM implementation or the authority to make decisions about it. Therefore, the researcher did the interviews with just the staff that could cover the information, which the study is looking for. Doing interviews with staff with little knowledge about the TQM implementation will not add any value to the research on the one hand and on the other hand, could cause a reflexivity problem by getting fabricated answers instead of valid ones (Yin, 2014).

4.7.4 The need for longitudinal study

The reason of choosing the longitudinal approach was to explore how the decision-making processes shape the TQM implementation over time. According to Yates (2003) referred to the "invention" of longitudinal studies as an ongoing and creative process. Ongoing discussions and further analysis of methodological continuity and modification as well as reflections from within can be useful cognitive tools when dealing with ambiguity and complexity associated with longitudinal qualitative research. Spencer et al. (2003) defined longitudinal studies as approaches that involve more than one episode of data collection, and Epstein (2002) proposed that longitudinal design could include ongoing research in the same community for extended periods of time, with periodic restudies at some intervals or by returning to the same site after some time. Longitudinal studies are commonly characterized by investigation of change over time, time in context, and time and texture of experiences (Corden and Millar, 2007, Neale et al., 2012, Ritchie et al., 2013).

Several other authors have articulated the need for longitudinal studies of the effects of TQM implementation (Douglas and Judge Jr, 2001, Reed et al., 1996, Samson and Terziovski, 1999, Sitkin et al., 1994). This research design helped the researcher to track how the implementation of TQM have been changed within the time in the two hospitals, which in turn helps to understand how and why the decision-making process shape the TQM implementation.

A longitudinal qualitative interview approach with 24 participants conducted from the two hospitals. Two interviews, one happened at the beginning of the TQM implementation with 12 participants, and the second one occurred after 18 months form the implementation with the same number and the same positions, but not all of the staff were same, as some of them have been changed (see table 4.3). Each interview lasted for an hour and half to two hours and half. The participant's responses helped the researcher to understand the differentiation between the two hospitals regarding the decision-making processes and the TQM implementation.

Table 4.3 Interviewees Details

First interviews	
Case Study A	Case study B
Hospital manager A1	Hospital manager B1
Board members A2, A3, A4	Board members B2, B3, B4
Quality committee manager A5	Quality committee manager B5
Quality committee member A6	Quality committee member B6

Second Interviews	
Case Study A	Case Study B
Hospital manager A7	Hospital manager B7
Board members A8, A9, A10	Board members B8, B9, B10
Quality committee manager A11	Quality committee manager B11
Quality committee member A12	Quality committee member B12

4.7.5 Conducting the Pilot Study

Saunders *et al.* (2007, p.606) define a pilot study as: “*a small-scale study to test a questionnaire, interview checklist or direct observation schedule, to minimise the likelihood of respondents having problems in answering the questions and of data recording problems as well as to allow some assessment of the questions’ validity and the reliability of the data that will be collected*”. Piloting the interview questions is a significant matter for the researcher.

The researcher did three pilot study interviews by video call on Skype with two levels of respondents to check the interviewees’ understanding of the research issue and to test the interview questions before approval from the ethics team in the university was gained. These people were a hospital manager from case A, quality committee manager from case B, and one of the quality committee members from case A, who were suggested by the Basra Health Directorate. The pilot study provided the researcher with excellent feedback on the suitability of the questions, which would be used in the real case studies. Two from the three staff used in the pilots were used for the main interview, as they had critical positions (Hospital manager and quality committee manager) and had they been excluded, that would have affected the results of the study, as they are who start to implement TQM from the beginning. In addition, doing an interview with the hospital manager and quality committee manager from one case and exclude the other one from the second case, would lead to missed valuable information could help the researcher in his study.

The pilot interviewees agreed about most of the questions, but at the same time, they amended and suggested some points be more suitable with the reality. As a result of the pilot study, the main changes were in asking questions about the staff authority to make a decisions, the responsibility of gather information, the responsibility of choose staff, has staff opinions were considered in making a decisions and which barrier could impeded TQM implementation.

4.7.6 Reliability of the Data

When the researcher had finished the pilot study interviews and ensured that the questions were sufficient to collect the required data, the researcher started to arrange the time and place of the interviews. Most of the interviews were conducted on the case study hospitals’ premises to allow the researcher to access the appropriate documents. In addition, data collected by the interviewer was recorded by note-taking and digital

recording (Yin, 2014), this enriched the research outcomes and gave confidence in the accuracy of the interview process and ensured the reliability of the research in general. Furthermore, the researcher used multiple sources of evidence to increase the reliability and validity of data (Yin, 2014).

When the researcher had transcribed everything (the recordings and notes), he returned these transcripts to the interviewees to verify the author's transcription to increase the reliability of data.

4.7.7 Translating the Interview Questions

Because the research was conducted in an Arab-speaking country, the researcher translated the interview questions into Arabic. The reason for translating the interview questions into Arabic was to ensure that the interviewees could share with the researcher the objectives of the work. This method is recommended by Fontana and Frey (1994, p.371): *"for the people whose use of language is crucial for creating participatory meaning in which both interviewer and respondent understand the contextual nature of the interview"*. Then the researcher translated all the interview transcripts back into English. To be more accurate with the English translation, the researcher relied on an English teacher who is working in Basra University to help in translating the interviewees' responses to ensure their correctness. The English teacher helped in translating from English to Arabic and from Arabic to English.

The figure 4.3 below explained the whole process:

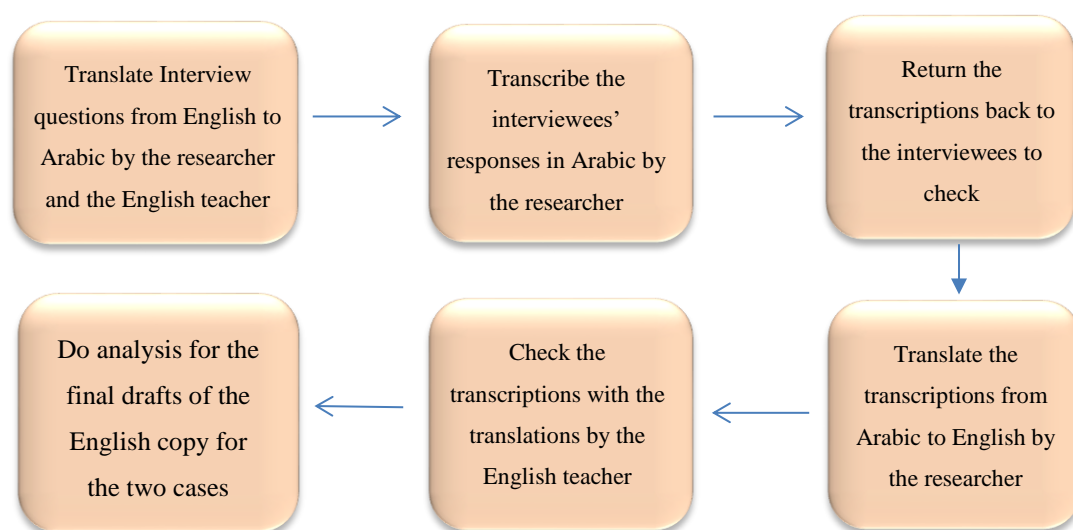


Figure 4.3 The process of translation of the interview questions and responses

4.8 Ethical Considerations

The University of Salford's ethical policy obliges researchers to apply for approval before conducting field studies. Cooper and Schindler (2008, p.34) defined research ethics as the "*norms of behaviour that guide moral choices about our behaviour and our relationship with others*". Thus, the researcher got approval from the ethics panel in the University of Salford.

To ensure the complete satisfaction of the respondents, the interviews were conducted according to the following conditions:

- They were held at times convenient to the interviewees.
- The approval of interviewees was obtained before the interviews took place.
- They had the right to cease them at any time.
- They were informed of the purpose of the research before the interviews.
- The confidentiality of their personal data was guaranteed in advance.

4.9 Data Analysis

As Yin (2014) notes, the overall goal in data analysis is to treat the data honestly, produce compelling, analytic conclusions and rule out alternative interpretations. Saunders *et al.* (2007) affirmed that, because of its nature, there is no standardised approach to the analysis of qualitative data. Hardy and Bryman (2004, p.398) noted that: "*clear-cut rules related to how qualitative data analysis should be achieved have not been established*". Many strategies exist in this respect, although an analytical strategy is commonly used (Hussey and Hussey, 2003). Taylor and Bogdan (1984) stated that all researchers develop their own way of analysing qualitative data and Yin (2014) noted that analysis consists of examining, categorising and tabulating data; however, Flick (2007) added that the objective of qualitative data analysis is to identify, examine, compare and interpret patterns and themes.

In this study, the researcher will begin the analysis after finishing the fieldwork (data collection), using the following procedures:

1. Translating the interview transcripts from Arabic into the English language.
2. Reading through all interview transcripts, notes, recorded tapes and documents, to become intimate with the data as recommended by Huberman and Miles (2002), who

stated that, before sifting and sorting the data, the researcher must familiarise himself with its diversity and gain an overview of the gathered material.

3. Combining the data, which means attaching relevant bits or chunks of data (referred to as units of data) to the appropriate category. A combination of data could be a number of words, a sentence, a paragraph or sometimes a complete answer to a particular question asked in the interview. At this stage transcripts will be copied, cut up and placed into files, each containing piles of related units of data corresponding to a particular category (Saunders *et al.*, 2007). During this stage of the analytical process, the researcher will be able to reduce and arrange the data into a manageable and comprehensive form (Easterby-Smith *et al.*, 2012, Saunders *et al.*, 2007).
4. Yin (2014) stated that the analytical techniques, which are used for case study analysis, are Pattern Matching, Explanation Building, Time-Series Analysis, Logic Model and Cross-Case Study Synthesis.
 - **Pattern Matching:** is used to compare an empirically based pattern with a predicted one. If the case matches the predicted pattern, then the case supports the theory in the same way as a successful experiment supports a theory. If the pattern matches, the results can help to strengthen the internal validity of a case (Yin, 2014). This study contains a predicted pattern (the theoretical framework) derived from the literature review and alternative predictions. Therefore, pattern-matching was considered as a possible mode of analysis in this study.
 - **Explanation-building:** is considered as a special type of pattern matching. The goal of this technique is to analyse the case study data by building explanations about the case and to develop ideas for further study (Yin, 2014).
 - **Time-series Analysis:** the time series technique is a special and more rigorous case of process tracing in which the researcher attempts to establish the existence, sign and magnitude of each model link expected, and the sequence of events relating to the variables in the model (De Vaus, 2002). Yin (2014) argued that if the events over time have been traced in detail and with precision, the time-series analysis technique might be possible.
 - **Logic Model:** the logic model intentionally specifies a chain of events over an extended period of time. The events are in a repeated cause-effect-cause-effect pattern, whereby a dependent variable (event) at an earlier phase becomes the

independent variable for the next phase. This process can help define the sequence of programmatic action that will accomplish the goals (Yin, 2014).

- **Cross-case Synthesis:** cross-case synthesis is a technique especially relevant to research consisting of at least two cases, and it is explaining the causal links in real-life situations that are too complex for a single survey or experiment (Yin, 2014).

Based on the above description and discussion of different strategies used for qualitative data analysis, the researcher adopted pattern-matching as the most appropriate methods for this study. Pattern matching used to compare between an empirically based patterns with predicted one, and in this study, the author compared between the theoretical framework (predicted pattern) with empirical case studies (Iraqi hospitals). The author not looking to trace the change of TQM implementation over a period of time, and for that time series analysis is not appropriate for this study. Logic model, which is combined with pattern matching and time series analysis is not appropriate for this study, as the logic model without time series analysis is not possible. Cross-case synthesis will be useful for this study, as the author looking to do a comparison between the public and the private Iraqi hospitals (Case study A and B), and this comparison will take place on the discussion chapter to find out how decision-making influence TQM implementation factors.

4.10 Chapter Summary

In this chapter, the several methodological choices made by the author were described and justified. The research strategy for this study is a case study. The research design was produced, and two cases were selected to explore. The data collection methods were selected, which contain interviews as a primary source. The data analysis technique is the pattern-matching. The next chapter contains the research findings.

Chapter Five

Research Findings

Chapter 5 Research Findings

5.0 Chapter Introduction

The previous chapters provides detailed background and literature related to the study of *explore how centralisation and decentralisation of decision-making shape TQM implementation in Iraqi hospitals*. Qualitative research design has been chosen and justified in section 4.2.2 (p.73). Data collection methods have been chosen in section 4.5.2, (p.78), which were two types, interviews as a primary method and documentation and archival records as a secondary once. This study is comparative case studies between the public and private Iraqi hospitals, so, the author collected the data for two cases, one from the public sector which follow the centralisation in decision-making, and one from the private sector which follow the decentralisation in decision-making, the justification of choose these two cases placed in section 4.4, (p. 76). The study been used pattern matching to analyse the data. The following sections explained the result of each case studies.

5.1 Case Study 'A' the Centralised Case (Public Hospital)

Basra General Hospital (Case A) is one of the oldest hospitals in Basra City. Established in 1917, it is considered a historical icon in the city, where it has provided health services for people in Basra, Iraq and the Gulf countries. The hospital contains 1700 staff members, and held a capacity of 870 beds at the time of the research. The hospital staff conduct around 2000 surgical operations a month, 1000 emergency room consultations a day and 1000 outpatient consultations a day, with 2-4 persons accompanying each patient. The building itself includes six main departments, divided into 26 subsections.

The interview questions were structured based on the theoretical framework, which is placed in Chapter Three (p.65). So, in turn, the interview responses were structured depends on this framework, and the next sections explained the interviewees' responses further. The interviewees' details were placed in section 4.7.3, (p. 83). Appendices 4 & 5 content the summary of the interviewees' responses of case A.

5.1.1 Decision-making steps

5.1.1.1 Identifying the decision to be made

In the theoretical framework, the first step of the decision-making process was identify the decision to be made. When the interviewees been asked about how the decision of TQM implementation was considered, the interviewees agreed that this decision was considered by the GD and that happened in November 2013 by formal letter to the hospitals, but was not activated until early 2014. Following the decision itself, the hospital started to plan how to implement TQM and choose who was going to be involved in the implementation process.

Interviewees A2, A3 and A4 responded that in the early steps of the implementation the staff who going to be involved in this implementation were chosen. Next, a plan of action was put in place by the hospital management, as TQM implementation was a new concept for the hospital in question – therefore, the staff required a detailed plan in order to gather information on the process and implement TQM properly. Contrastingly, Interviewees A1, A5 and A6 responded that the hospital put a plan in place at the request of the GD.

Hence, it was not clear if the implementation plan was set by the GD, or if it was left to each hospital to decide how to implement TQM.

Interviewees agreed that when the hospital started in TQM implementation, the hospital did not have any idea about the TQM, so, the one who is responsible about the whole process is the GD, and until now the GD keeps centralised these process. Interviewees A10 and A12 stated *“the hospital following a high level of centralisation in decision-making, as even identification problems need approval from the GD”*.

Thus, after two years of the implementation, the GD still control the implementation, and even identification the problem is not belong to the hospital management alone, as GD approval needed.

5.1.1.2 Gathering information

Most of the interviewees agreed that the quality committee who is responsible for gathering the information regarding TQM implementation under the GD supervision; however, interviewee A5 added that the department’s managers also sharing in the information gathering role.

Information gathering formally was set with deadlines and a minimum number of staff to attend, and the means to do this is exclusively face-to-face meetings and by a survey.

It seems a low level of staff involvement in setting a strategy for gathering the required information.

5.1.1.3 Identifying the alternatives

The GD was not put into consideration to set plan B for any decision, and even when the hospital starts to implement TQM it still follows the same policy, according to the agreement of the interviewees. This is one of the reasons for the low performance in terms of the issue of quality. However, there was no alternative considered before implementing TQM.

5.1.1.4 Choosing from the alternatives

There were no alternatives considered, so there was no choice to be made; however, for ordinary decisions – those that are not related to TQM implementation – the hospital's primary method to choose between alternatives and come to an overall decision is a board meeting, as the interviewees mentioned.

Furthermore, in the case of TQM, the hospital has no right to choose which alternative is better for implementation, as that lies outside of the hospital authority. Yet, the hospital does indeed have the right to make decisions in some cases – those unrelated to TQM implementation. In terms of the GD, the reasoning behind this method of semi-centralisation remains unclear: moreover, it means that the hospital staff are unaware of whether or not they have the power to influence decisions.

Interviewee A6 stated that “ *even when the staff suggest an alternative for any decision, then the whole glory will go to his manager as he was the one who asked his staff about their opinion and nobody knows that, which leads the staff feel more not interesting to set any alternatives for any decision*”. This is an interesting point to study, as no one from the interviewee mentioned it before.

5.1.1.5 Taking Action

At the beginning, the decision to implement TQM was supported by the senior management, who set clear objectives in order to help with the implementation. The first step saw the hospital undergo a self-assessment in order to know the current state of the

organisation, and how TQM implementation would improve upon it. The decision to implement TQM was considered by the hospital management during a board meeting on 23rd January 2014, within the first 3 months of the GD decision. At this point, the hospital management had very limited authority, as they could only implement what the GD had set out for them. The limitation of the staff authority is led to reduce the commitment of the SM, as the interviewees A8 and A9 mentioned.

Hence, there were very few actions that could be taken by the management regarding implementation – the hospital authority itself is limited to a few tasks, such as conducting a self-assessment or choosing which members of staff would be involved in the implementation process.

5.1.1.6 Monitoring and Evaluating

Throughout the entire process, the GD is responsible for monitoring and evaluating the TQM implementation within the hospital. When some issues arose, the hospital management would request an urgent meeting with the GD to discuss the situation – this was an attempt to make the process as quick as possible, as the hospital management were limited in which decisions they could make without GD permission. In these circumstances, the hospital management could not act at all until they received a response from the GD – hence, this caused a delay to the entire process. Monitoring and evaluating the hospital progress is not belong to the hospital management alone. The hospital conduct a primary assessment, which would then be sent to the GD and reviewed in more detail. With this process in mind, however, it is difficult to ascertain what the hospital considered an ‘urgent’ situation, with need for GD input, and what they did not consider to be as urgent, as this was never fully explained during the case study. Interviewee A10 mentioned that the hospital was in need for a medical equipment last year, and to get this equipment it took 7 months from the hospital to get it, not because there was no fund to buy it, but this is what the GD approval took.

At some point between March 2015 and September 2015, the management developed a progress report form. A form like this would be sent to the GD every three months, so they could monitor and evaluate the hospital’s progress. Thus, according to the interviewees’ agreeance, the GD keeps control almost everything in the hospital, as even the hospital self-assessment is supervised by the GD and they need to send the reports every three months for the evaluation.

5.1.2 TQM Implementation

The following sections explained the interviewees' responses based on the TQM implementation factors, which are placed in the theoretical framework in chapter three (p. 65).

5.1.2.1 Senior Management Commitment (SMC)

In 25th March 2014, Basra health directorate conducted a presentation for members of staff (the quality committee) and to the board members to explain the benefits of TQM implementation for the hospital, and this presentation was created by a Governmental consultant⁶. Furthermore, on the same date, the hospital management held a board meeting to discuss the implementation benefits and how the hospital going to implement TQM.

In order to gain the senior management commitment, interviewees A1, A2, A4 and A5 mentioned that the main action taken was regular board meetings. However, A9 and A10 mentioned that the commitment of the SM was not there from the beginning. While interviewee A12 said, *"of course, there is commitment from the senior management, as they believed they will be in this position for a while and they need this commitment to keep them secure"*. This is an interesting point to study, as nobody mentioned it before.

The hospital management started by choosing the quality committee and who was going to be involved in the TQM implementation process, both of which were monitored under the control of the GD.

The main barrier to the implementation of TQM was the limitation on the hospital's authority – this was a direct result of the GD's high level of centralisation in decision-making. Moreover, there was no way to avoid this barrier as the interviewees agreed: the

⁶ The Governmental Consultants were assigned by the Iraqi Health Ministry to explain the benefits from the TQM implementation through presentation, which happened at the early stages of TQM implementation, as well as, to be responsible for inspection tasks to check the hospital progress level regarding the implementation.

hospital management had only the right to implement decisions that had already been taken by the GD.

Members of the quality committee received training about TQM. In turn, they would then give the rest of the hospital staff elementary training on the subject. In light of this training process, the hospital tried to make clear objectives for each member of staff to fulfil.

In addition, it seems that every member of staff followed decisions to the letter, without refusal, as they believed that it was their duty to implement any decision. During the case study, there was one exception to this - interviewee A6 said *"I declined to follow one decision, and received a managerial punishment as a result"*. Interviewees A8, A9 and A12 mentioned that does not matter whether the SM have commitment or not, as they still have to follow what the GD asking them to follow. This is why almost none of the staff refuse to follow any decision delivered by the GD.

5.1.2.2 Staff Involvement (SI)

From the board meeting notes on 27th February 2014, the hospital form the quality committee and select who was going to be responsible for the implementation process.

All of the interviewees agreed that the hospital manager is responsible for selecting which staff members would be involved; however, the quality committee is also able to have input on this decision, as both parties shared the responsibility.

When the hospital began to implement TQM, each of the interviewees had already had previous experience working as a group, and were able to once again once the implementation began. This help them throughout the process, as they are able to share information about TQM implementation amongst other members of their team. Each member of staff is familiar with this team-working strategy before TQM was implemented within the hospital. However, interviewees A6, A8, A9 and A12 agreed that less staff being involve in the implementation process, as they have limited knowledge regarding these process. According to the interviewees A4, A7 and A11, the reason of the limitation of involvement is the hospital management is strict about keep the information with the top management, so, the staff already feel like they are not part of this implementation.

5.1.2.3 Training

Within the hospital, the Training and Development Department are the team responsible for choosing which members of staff are to be involved in training programmes. Three of the interviewees A3, A4, and A6 participated in the suggestion of training programmes, but these suggestions did not go further, as it is the sole responsibility of the Training and Development Department to make decisions regarding which methods of training are utilised, and which members of staff are trained.

The only consultant from outside the hospital was from the Basra health directorate, who visited the hospital to conduct training with management at beginning of the TQM implementation.

There was little knowledge about the decision-making process, because there was no specific training regard this issue. Furthermore, most of the hospital departments' managers did not have any training regarding TQM implementation, other than induction programme of the TQM implementation by the Basra health directorate. In addition, the hospital does not have any particular policy in which disappointing training results would be managed or rectified, as the interviewees A8 and A10 mentioned, which means the hospital not put in consideration the quality of the training programmes outcomes.

It was the opinion of the interviewees A8, A9, A10 and A12 that members of staff see themselves as professionals, without need for any extra training, which leads to reduce the number of staff who would involve in the training programmes, also, another factor of this reduction is the limitation of the hospital budget regarding the training programmes. Thus, within the small amount of training which had been carried out, but it has provided some awareness that the overall lack of training meant that there was a little knowledge of the TQM implementation.

5.1.2.4 Employee Empowerment (EE)

The hospital manager was responsible for empowering employees to make decisions; however, the management were limited on their authority to make a decision regarding the TQM implementation, which was considered one of the main reasons to ignore the staff opinions regarding any issues, as the hospital could not go further with these opinions without authority. The quality committee was considered as the second port of authority after the hospital manager, who had some authority to make a decision regarding TQM implementation.

The interviewees realised that most of the staff were happy to be empowered, because they wanted to prove themselves; however, interviewee A9 stated, *“the staff are not interested in holding authority, as there is little support offered if staff make incorrect or ineffective decisions”*. This lack of employee support is an interesting factor that has not been mentioned before, as how staff would like to be involved either when they do not have empowerment or when there is empowerment but without support from the top management for their decisions.

5.1.2.5 Continual Improvement (CI)

The hospital manager and the board members were responsible for choosing the continual improvement method, which was effective because it shared more than one mind (hospital manager and board members); however, interviewee A8 said that *“this group decision making was done in order to protect individuals from making bad decisions – if something go wrong, it is the decision of the whole group.”*

The hospital held a number of board meetings to discuss and develop the continual improvement method – they did so on 22nd August 2014, 29th May 2015 and on 25th Jan 2016 - but this discussion did not bring forth any development to the hospital, as most of the issues discussed required GD approval in order to advance.

Most of the interviewees mentioned that staff did not have any training about CI, because the hospital does not have any fund for this kind of training. As a result, the staff had gained some very limited knowledge regarding the CI method from the quality committee.

Thus, there is only a little knowledge amongst staff about CI, in addition, the GD and the hospital management does not consider this factor as an important factor for implementing TQM and that’s why there is no fund or training regarding it.

5.1.2.6 Communication

On 27th May 2014 and from the board meeting report, a communication plan between the hospital and the GD was set. This plan mainly involved a report being sent between the hospital management and the GD every three months, which would contain information about the hospital’s progress.

At some point between March 2015 and September 2015, the hospital developed this the progress report form. It seems there is little knowledge of the role of this plan, as it have

been used just by limited number of staff to send the hospital reports to the GD to keep them informed regard the TQM implementation. However, according to most of the interviewees opinion , the communication plan trying to connect the hospital management with the GD, but this communication does not increase the hospital management authority or even reduce the time, which is need to make a decisions by the GD.

5.1.3 General Questions

- 1. Is there anything else that we have not discussed that you think helped TQM implementation?**

No.

- 2. Is there anything else that we have not discussed that you think prevented TQM implementation?**

The interviewees mentioned the external influences and especially the political interventions is one of the barriers, which is working against implement TQM.

- 3. How were these hindrances overcome?**

Nothing could overcome these hindrances.

5.2 Case Study 'B' the Decentralised Case (Private Hospital)

Established in 2000, Almosawi hospital – or, 'case study B' - is the largest private hospital in Basra. It was the first private hospital in the area to implement TQM, and the premises have been supplied with the most modern medical equipment and all the essential accessories. The hospital started to implement TQM after it was requested by the government, before gaining their ISO 9001 certificate in 2015.

As mentioned earlier of this chapter, the interviewees' responses were structured based on the theoretical framework and the interviewees details were placed in section 4.7.3, (p. 83). The appendices 6 & 7 content the summary of the interviewees' responses of Case B (the decentralised case).

5.2.1 Decision-making

5.2.1.1 Identifying the decision to be made

The decision to implement TQM was first considered in November 2013 by the GD; however, the hospital did not activate it until the early months of 2014. The hospital had begun to consider TQM implementation from around 2012 – at this time, they tried to find an external consultant to help them in the implementation procedures, as the management had little idea of how to start. Therefore, the first steps this hospital took to implement TQM was forming a quality committee to decide who was going to be involved in the implementation processes.

It was not made clear by management why the hospital took two years to find an external party to assist with the implementation of TQM, and then abandoned the idea; it is also unclear as to why, when the GD requested it, they began to implement TQM within 2-3 months. In addition, hospital management were uncertain as to who decided to implement TQM in the first place – was it the manager themselves, one of the board members, or a decision shared by members of staff? This question was not answered by any interviewees.

5.2.1.2 Gathering Information

The hospital manager, quality committee and departments' managers were each responsible for gathering information. At the beginning of TQM implementation, the

hospital worked with AGS institution ⁷ and Digi net company ⁸ to understand which information hospital were required to look for in order to help with the implementation processes. The quality committee created a mobile team, which contained a member of staff from each of the main departments in the hospital. This team is responsible for gathering the required information regarding the TQM implementation across the whole hospital, in addition to the departments' managers' participation in this process.

The hospital then established a database to store the information they found – this database is incredibly useful, in that it help the hospital reduce time wasted looking for some information they had already located previously.

5.2.1.3 Identifying the Alternatives

Normally, the hospital did not follow this policy, as they did not identify any alternatives for the decision they want to make; however, if there were any alternatives could be considered, then the top management would have been responsible for identifying them. While interviewees B3 and B6 mentioned that, the hospital not put in consideration plan B for any decision regardless the context. Interviewee B2 said *“the hospital looking for implement one of the quality concept which is do it right from the first time.”* The researcher found this as an excuse for the hospital for not consider plan B, as if a decision been made was wrong then that will cost money and time, and in the health care sector might be cost someone's life, so when the hospital not put any alternatives in consideration that means not meet the quality requirements.

5.2.1.4 Choosing from the alternatives

As there were no alternatives considered, so there was no choice to be made; however, within the normal situation, the hospital would consider the employees opinions, especially those who already have authority to make a decision – this would happen

⁷ AGS institution: This organisation, which is based in Ontario, helped the hospital to implement TQM. <http://agsrehab.com>

⁸ Digi net company: A company which have years of experience in information technology and helped to design a database for the hospital. <http://diginet.pro>

through means of a face-to-face interview. Interviewees B2, B3 and B6 agreed that employees' opinion are considered when the hospital intend to make a decision, not for the alternative decision, as the hospital not following this process.

It was unclear as to why the hospital held the authority to put alternatives forward regarding any decision they want to make. In addition, the hospital staff did have the appropriate knowledge regarding decision-making procedures, but they still not follow this step in the implementation of TQM.

5.2.1.5 Taking Action

The GD decision for implementing TQM was fully supported by the SM, because the hospital already was considering TQM implementation; however, it was clear that the management had limited knowledge on the subject, as at the beginning of the implementation the hospital would have to refer to the GD on multiple occasions in order to seek advice on how to implement TQM. As a first step, the hospital management engaged in a self-assessment in order to familiarise themselves with the state of the hospital before implementation began.

In addition, the interviewees agreed that the hospital management take into consideration any expert staff opinions when action needed to be taken regarding TQM implementation.

5.2.1.6 Monitoring and Evaluating

When the hospital began to implement TQM- and, even before this stage - there was a belief that implementation of TQM required every single person to be involved in the process and be responsible for their own work at the same time, as the hospital did some research regarding TQM implementation. That is why each departments' managers – alongside the quality committee - are responsible for evaluating their department progress and conducting an evaluation for the whole hospital. This evaluation occurring at a non-scheduled time, in order to keep staff working hard as they expect the evaluation to occur at any moment.

Normally, there would be no delay in the decision-making process, as the hospital had the authority to decide which process was required to make a decision; however, if there was any delay, the quality committee would take action regarding it, checking in detail the reasoning behind the delay. In some cases, if the delay was outside of the quality committee's authority, this action could be taken through a board meeting.

5.2.2 TQM Implementation

5.2.2.1 Senior Management Commitment (SMC)

When the decision was made to implement TQM, the hospital management knew very little about TQM, which was the biggest obstacle to launching the implementation. For this reason, hospital management requested that AGS and Digi-Net Company helped with the implementation – the decision to request this external assistance was made through a board meeting, and the hospital created a contract with AGS and Digi-Net in February and March of 2014 (the researcher managed to have a look for those two contracts). Furthermore, each department's managers were to hold meetings with the staff who were working with to explain to them about TQM, and what they could expect from it. At this stage, as Interviewee B3 and B6 added, they also decided which training programmes the staff could enrol on in order to help them to understand the implementation steps.

The Quality committee playing a vital role in the supervision of the operation, as they check the department's progress reports which intended to maintain a high level of commitment from them throughout the implementation process. Furthermore, conducting regular meetings assist with the upkeep of this commitment. In addition to quality committee role, SMs have the authority to evaluate the departments' progress, which happen on a monthly basis. The attempt to gain senior management commitment from the hospital happened from the early steps of the implementation, as the hospital believe missing this commitment leads to having a negative effect and fail the implementation. The main actions to gain the SMC were authorised them to do contract with external consultants⁹ to give more confident with the implementation process, in addition to doing regular meetings to discuss any difficulties could affect the implementation. As the interviewees mentioned that, the regular meetings help the SM to feel they have support from hospital management.

⁹ The external consultants were duplicated in the private sector, which affects the decision-making process in a different manner, as these independent consultants were responsible for training the staff regarding the TQM within a specific time, in addition, to help with established a database.

After 2013, the government granted authorisation for local managers in the private sector to make their own decisions – as they were given this flexibility, the managers did not refuse any decision to implement it, despite the fact that not all of the decisions made by the management were perfect.

The implementation objectives were clear from the beginning, even with the limitation of the hospital staff knowledge about the TQM, as they believed that clear objectives are easy to follow and implement.

5.2.2.2 Staff Involvement (SI)

The hospital manager and the board members are the key parties responsible for deciding who and how many people would be involved in the implementation processes. The hospital manager chose the staff, and could ask for assistance from the quality committee in order to do so – however, it seems that the quality committee were not involved, as nobody mentioned this factor to the quality committee, just the committee manager.

The interviewees agreed that working within teams is helpful for the hospital and for them as individuals, as they tried this method before and gained great knowledge from it. On some occasions, the hospital manager did not like to let staff work in groups or as a team, as it may have led to failure in completing tasks individually, such as collecting information from specific departments – sometimes this requires one-member of staff, not a group effort.

Interviewees agreed that the hospital management within the time realised that the necessity to involve the staff in the implementation process, which happened at the beginning of the implementation but not in a wide range.

5.2.2.3 Training

The hospital manager and board members discussed which training programmes the staff needed – the department managers and the quality manager were also consulted, especially if the programme related to the TQM implementation. It seems that none of the department managers conducted training with staff, as they normally could help in shaping or suggesting training programmes. In this case, the only parties who conducted the training were either external consultants or the training and development department, with the exception of the quality committee, as they participated in doing some workshops for the staff.

There was no specific training about how to make a decision in the hospital, or which processes should be followed. Most of the interviewees did not receive this training, except interviewee B2, who attended a workshop at Basra University focused on the decision-making process.

The interviewees also mentioned that the hospital have a special policy to deal with disappointing training results, such as a delay in employee promotion, while interviewee B5 mentioned that, *“in reality, this policy was not available, as nobody would be punished for this before.”* However, no documents were found to support this claim.

5.2.2.4 Employee Empowerment (EE)

Each department manager is responsible for empowering their staff to make a decision. The SM would support the employee's decisions; however, the hospital management refused to implement decisions related to financial issues. Furthermore, it was required that the hospital manager should be informed regarding any decision the staff had made regarding the TQM implementation. This means that staff were not fully empowered to make a decision, and the hospital manager keep high level of centralisation in this issue.

It is unclear as to whether members of staff were required to simply inform the hospital regarding any decisions that had made, or if they needed permission to implement their decisions; none of the interviewees would discuss this further. Whilst the staff did enjoy some empowerment, and the ability to make decisions, the decisions they made would not be executed until the manager had been informed – therefore, this placed a limitation on employee empowerment.

5.2.2.5 Continual Improvement (CI)

The hospital manager and board members were the main parties responsible for deciding which methods were the best for implementation. The department's managers would then be informed about this method by the hospital manager or the board members. Some of them held two positions at the same time – that is, board member and department manager. Most of the departments' managers worked towards informing the staff which method would be implemented for CI, as there is no other way to notify the staff about any details they are working with. This was done by means of face-to-face interview, as department managers believed it would help to improve the implementation of the TQM.

Although the staff being informed regarding the continual improvement methods, but there is no mentioned that the staff being involved to choose these methods or even been asked about them opinion regarding the efficiency of the improvement methods.

5.2.2.6 Communication

The hospital set out the communication plan from the early steps of the implementation of TQM - the main target for it was to connect the hospital departments between each other to inform them about any progress in TQM implementation. In addition, the plan also stipulated that the hospital should communicate with the GD, especially at the beginning of the implementation. Moreover, the communication plan helped to reduce waste of time within the normal way of the communication, which considered just a hard copy or a paperwork for anything.

5.2.3 General Questions

The interviewees had nothing to add.

5.3 Chapter Summary

The finding of the research was presented in this chapter. Background information for the two cases have been presented at the beginning of each case and then followed by analysis the interviewees' responses and any documents related to that. The researcher did interviews and then following interviews with each case study. These two interviews assist the researcher to explore how and why the decision-making process influence TQM implementation in Iraqi hospitals, which is help to develop the theoretical framework that is placed in the next chapter.

In the next chapter, the findings in this chapter will be discussed with highlighting the literature.

Chapter Six

Discussion

Chapter 6 Discussion

6.0 Chapter Introduction

As noted in chapter 5, the current study gathered data from two case studies of Iraqi hospitals, one from the public sector, and one from the private. However, this chapter is organised to discuss the original research question and interprets the findings in relation to relevant literature. This discussion highlight each of the decision-making process, the six CSFs of TQM implementation, and the corresponding findings in the case studies. This chapter aims to addresses the second and third objectives of this research:

RO2. To explore how centralised and decentralised decision-making influence TQM implementation factors in Iraqi hospitals.

RO3. To understand why centralised and decentralised decision-making influence TQM implementation factors in Iraqi hospitals.

In addition to addressing the fourth objective, which is *developing a conceptual framework that helps understand the influence of decision making approaches and processes on TQM implementation factors in Iraqi hospitals*. The theoretical framework is discussed in light of the case studies' findings.

In the final part of the discussion, the conduct of the research and the research methodology critically reviewed. The limitations of the study discussed also in this chapter.

6.1 Discussion of Case Studies

The following subsections discussed the case studies' findings based on the six CSFs of TQM implementation and how each factor was influenced by the decision-making steps. Two steps of the decision-making process have been excluded. These two steps are identifying the alternatives and choosing from the alternatives. As the two cases did not identify any alternatives for decisions, they wanted to make and because there were no alternatives considered, so there was no choice to be made.

6.1.1 Senior Management Commitment (SMC) and the decision-making process

Arsić *et al.* (2012) indicated that to introduce decision, there needs to be a commitment from senior management, as commitment and confidence from senior management are very important for organisational achievement. It was clear from the literature review that

gaining senior management commitment is a crucial step in the TQM implementation and one that needed to take place at the outset before involving other employees. There is much evidence in the literature that failure to gain commitment from the senior management leads to failure in implementation. The critical nature of gaining senior management commitment to implementing TQM has been addressed widely in the literature (Adeoti, 2011, Ahmad and Elhuni, 2014, Ajmal et al., 2016, Al-Shdaifat, 2015, Latif, 2014, Mellahi and Eyuboglu, 2001, Mittal et al., 2011, Pimentel and Major, 2016, Sabet et al., 2012, Talib et al., 2011a). The critical nature of this issue was borne out by the two cases examined in this research. The Table 6.1 (p.112) summarised the comparison between the SMC in the two cases.

6.1.1.1 SMC and identifying the decision to be made

In case A, it was clear that the SM had a commitment to the TQM implementation because the GD required that. Despite that, the government did not do much to gain this commitment; the main action, which was taken to try to secure the commitment, was a presentation by the GD to the hospital manager and the board members within the first 2-3 months when the implementation decision was made. The SM did not participate in the implementation decision, which was made by the GD, but they participated later on to make plans for how the hospital would implement it and choose the staff who were going to be involved, even though the SM had poor knowledge regarding the TQM implementation. This finding was consistent with Yapa (2012) who argued that, when managers have the enthusiasm to implement TQM, that did not mean they understood the implementation processes completely.

In case B, senior management commitment was gained from the early steps of the implementation. The hospital management made the decision to implement TQM and asked for help from an external consultant who did a presentation and training for the hospital staff. The flexibility to get help from the external consultant was because the hospital is working in a decentralised system, according to the interviewees' responses. This finding is in line with what was mentioned by Bashir (2015) who contended that decentralisation in decision-making helps to support SMC.

The two cases had the ability to identify problems, which were needed to make decisions regarding it and how these problems could affect the hospitals. This is in line with what was mentioned by Gregory *et al.* (2012), Hummel *et al.* (2014) and Ingram (2015), as

they concluded that organisations need to ask some questions when intending to make a decision, like what is the problem, why should the problem be solved, what is the influence of this problem, etc. However, in some events, especially in case A, the hospital management could not make a decision regarding a problem even if the problem had been identified, because GD permission was needed, as most of the interviewees mentioned. In the implementation process, participants agreed that they did not refused to implement any decision before, even in the decentralised case while they have rights to do this but there was no decision had been rejected. This is an interesting point to study as nobody mentioned this before in the literature.

6.1.1.2 SMC and Gathering Information 111

The ways of gathering information in the two cases were face-to-face meetings and surveys, and the staff who are responsible for that are the hospital manager, department managers, and the quality committee. This is in line with what was mentioned by Cooke (1991) and Elmansy (2015) who indicated that information needs to be requested from outside yourself through asking other members of staff, in order to make the right decision.

6.1.1.3 SMC and Taking Action

In the two cases, the hospitals started to implement TQM by doing a self-assessment. The SM were responsible for this decision in the two cases. This finding was consistent with Meyer and Hammerschmid (2010) who argued that SM were not affected that much by centralised or decentralised systems, as they still have the power and the authority to make decisions; however, in case A, there were some issues on which the hospital management could not make a decision, as the GD's permission was needed. The researcher did not manage to determine these issues, as none of the interviewees would explain that further.

The hospital's manager in case B mentioned that the hospital supported the implementation decision and started to choose the people who were going to be involved in this processes from the early steps, which is considered a positive point and helps in successful TQM implementation. This finding is in line with Ellen *et al.* (2014) who indicated that SMC is a fundamental factor for decision-making, which helps to promote projects and organisations and encourages individuals to participate in the decision-making process. However, in centralised case, according to the quality committee member, the commitment of the senior management is referred back to concern of losing

the SM positions if they do not have commitment regarding the implementation. This point is interesting to study more as the literature did not mention to issue like this before.

6.1.1.4 SMC and Monitoring & Evaluating

In case A, monitoring, and evaluating the action, which was made by the hospital, management was a shared responsibility between the hospital management and the GD. While in case B it belonged to the hospital management alone. This refers back to the issue of centralised and decentralised decision-making. Chen *et al.* (2013) and Cooper and Boyko (2010) concluded that when the performance does not reach the standards, that means the problem must be redefined again to ensure the quality of the decision. In case B, there was no problem with this step at all because the hospital had the authority to redefine the problem and improve the processes to do that. While according to the interviewees' responses in case A, the hospital management already had limited authority so, in case they faced a problem, they could not do more regarding that, but just follow the GD's orders. Interviewee A6 stated, *"I declined to follow one decision, and received a managerial punishment as a result"*.

6.1.1.5 Section Summary

According to the previous discussion, SMC in centralised case is influenced by three of the decision-making process, which were identifying the decision to be made, taking action and monitoring & evaluating the hospital progress. While in decentralised case SMC is influenced by the whole of the decision-making process. The table 6.1 below summarised the SMC in the centralised and decentralised decision-making.

Table 6.1 A comparison of the SMC in the two cases

SMC in Centralised case	SMC in Decentralised case
1. No many actions been taken to secure this commitment.	1. Many actions been taken to gain and maintain this commitment.
2. The main reason to maintain the commitment of the SM is almost lack of the SM turnover, and they already know this commitment will be the bridge to stay in this position.	2. The authority to make decisions is one of the main factors to maintain the SMC.
3. In this case, gaining the SMC was not really considered, as the GD assumed this commitment already exist and will not change with the time.	3. SMC is considered as a fundamental factor for the implementation, as it helps to encourage staff to participate in the implementation process.

4. The limitation of the SM authority because of the centralised decision-making is lead to minimise this commitment.	4. The high level of the SM authority helps to increase their commitment.
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Figure 6.1 below show which process of the decision-making influence the SMC in centralised and decentralised sector.

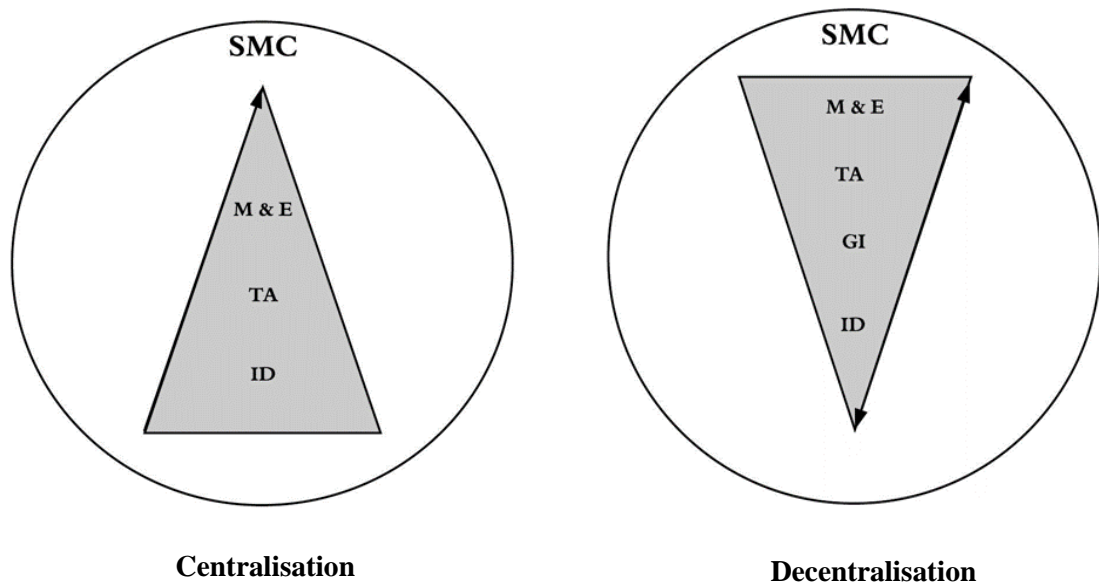


Figure 6.1 The influence of decision-making process on SMC

6.1.2 Staff Involvement (SI) and the decision-making process

Staff involvement and working as a team is a fundamental issue, as it helps organisations to achieve a higher level of skill performance and creates an effective attitude to solving problems (Chang *et al.*, 2015, Evans and Lindsay, 2007). The Table 6.2, (p.116) summarised the comparison between the staff involvement in the two cases.

6.1.2.1 SI and identifying the decision to be made

In case A, not many staff were involved at the beginning of the TQM implementation process because the GD focused just on the high levels of the hospital management. The hospital management then decided who was going to be involved from the staff and formed the quality committee. While in case B the hospital management encouraged the whole staff to be involved from the early steps of the implementation by holding meetings

with them to explain the benefits of the TQM implementation, in addition to encouraging them to enrol in training programmes. The one who is responsible for choosing the staff who were going to be involved is the hospital manager. This finding is consistent with what was mentioned by Antony *et al.* (2002) who indicated that clear understanding of what's required from the staff encourages and motivates them to control, manage and improve processes. However, the quality member stated even *"when the staff suggest an alternative, then the whole glory will go to his manager as he was the one who asked his staff about their opinion and nobody knows that, which leads the staff to feel more not interesting to set any alternatives for any decision"*.

In the two cases, it was considered that working as a team was a fundamental factor for success, but in case A staff just followed the GD's rules rather than being creative and having the authority to make a decision. While in case B, the staff had more flexibility to make a decision and participate in the decision-making process. This finding is in line with what was mentioned by Park and Deshon (2010) and De Dreu and Beersma (2010) who indicated that using teamwork to make a decision is better than an individual's decision, as teams use a large pool of information, which helps to avoid mistakes.

6.1.2.2 SI and Gathering Information

In case A, the hospital manager and the quality manager were responsible for gathering the information that happened under the GD's supervision. This finding was consistent with Maringe (2012) who argued that inclusiveness in decision-making decreases with the hierarchical level of the decision-making group and only small numbers of staff were allowed to participate in the decision-making processes at a high level. In case B, the departments' managers participated in this task, in addition to staff from the quality committee.

The researcher found that the two cases each had a mobile team, which contained a member of staff from each department to gather information regarding the TQM implementation by face-to-face meeting or through a survey. This finding was consistent with what was mentioned by Cooke (1991), Elmansy (2015), and Taylor (2013) who argued that, to make the right decision, enough information should be available about the problem and to get the right information it is necessary to ask staff by face-to-face meetings or through another way like a survey.

6.1.2.3 SI and Taking action

In case A the SM supported the implementation decision, they tried to do self-assessment as a first step and the quality committee participated in the assessment processes. According to the interviewees' responses in case A, the hospital did the assessment because the GD asked for that. In case B, the hospital did self-assessment to evaluate the hospital's progress later on and this decision was made through a board meeting which took place somewhere within the first 3 months. This finding was consistent with Bouraoui and Lizarralde (2013) who indicated that decentralised decisions optimise the efficiency of local management and offer appropriate distribution of responsibility, which helps the staff to be part of the process.

The ones who were responsible for taking action in the hospital in case A were the hospital manager and the board members, staff just implemented what the SM asked them to implement; one of the board members and the quality member stated that "*even identification problems need approval from the GD*". However, in case B, staff were involved in this step, according to the interviewees' responses.

6.1.2.4 SI and Monitoring and Evaluating

In case A, monitoring and evaluating the hospital's progress was not done by the hospital management alone, as it was a shared responsibility between the hospital management and the GD. Interviewees mentioned that this step belonged more to the GD than to the hospital management. This finding is contrary to what has been reported by Chen *et al.* (2013) and Cooper and Boyko (2010) who concluded that organisations should create a group to monitor and evaluate the decision, this group communicate with stakeholders to inform them about the benefits from the implementation, in addition, they redefine any problem to ensure the quality of the decision.

In case B, each department's manager was responsible for evaluating the department's progress regarding the TQM implementation and then passes the evaluation reports to the quality committee for evaluating the whole hospital.

6.1.2.5 Section summary

In centralise case, SI was influenced by two of the decision-making steps, gather information and taking action. While in decentralised case, SI was influenced by the

whole of the decision-making steps. The table 6.2 below summarised the comparison of SI in the two cases.

Table 6.2 A comparison of SI in the Two Cases

SI in Centralised case	SI in Decentralised case
No many staff were involved because the GD focused just on the high level of management	The hospital management encouraged the whole staff to involve in the implementation.
Gathering information is the hospital manager and the quality manager responsibility, which has been done under the GD supervision.	The departments' managers and quality committee participated in this task.
No many actions the staff involved in, as they implement what the top management asked them to do.	Staff were involved in taking action process, as they share in making decision in addition to implement the decision.
Monitoring and evaluating the hospital is shared responsibility between the hospital management and the GD.	Each departments' managers responsible to evaluate the people who are working with.

The

Figure 6.2 below shows which decision-making process influence the SI.

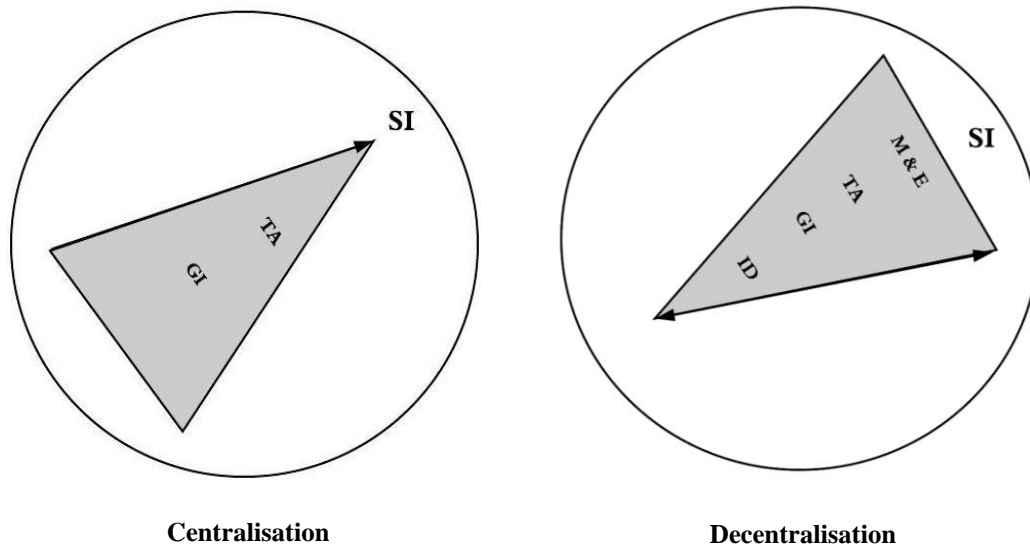


Figure 6.2 The Influence of decision-making process on SI

6.1.3 Training and the decision-making process

Training has become key for the field of employment in business for many years; in addition, one of the training benefits is increased staff skills to make decisions without

any hesitation (Chow *et al.*, 2008, Elmishri, 2000, Parumasur and Govender, 2013). The Table 6.3, (p.119) summarised the comparison between the two cases regard the training.

6.1.3.1 Training and identifying the decision to be made

Responses recorded in the two cases indicated that the ones who were responsible for choosing and planning which training programme the staff needed was the Training and Development department. In case A, staff suggested and tried to participated in identify which training programmes would be useful for them, but Training and development department did not consider staff opinion regarding this issue. While in case B, the quality committee participated in doing some workshops for the staff to help in understanding the implementation processes in addition to suggest which training programmes would help the staff in the TQM implementation. This finding was consistent with Lingham *et al.* (2006) who concluded that, if organisations do not support the staff involved in the decision-making process related to training and their own self-development, this leads to unwillingness on the part of employees to participate, and this is what happened in case A.

In case A the hospital did not have any particular policy to manage disappointing training results; however, in case B the hospital had a special policy to deal with this situation like a delay in making decision regard a problem, while two of the interviewees mentioned that such a policy did not exist in the hospital. The researcher could not find any supporting documents regarding this issue. This finding is not in line with Mosadeghrad (2013, 2014) who concluded that organisations should deal with insufficient training, as this is one of the greatest obstacles to success in TQM implementation in the healthcare system.

6.1.3.2 Training and Gathering Information

In the two cases, the ones who were responsible for gathering the information, which was needed for training programmes, were the Training and Development department. In case A, the hospital management did not consider staff opinions regarding different issues they faced, as most of the interviewees responded. This finding was consistent with McCracken *et al.* (2012) who indicated that the public sector was the greatest inhibitor of staff training participation, as this environment not really support training programmes, and this is what happened in case A.

In case B staff could suggest and participate in shaping training programmes, in addition to gathering the information which was required. This finding is in line with what was mentioned by Arsić *et al.* (2012) who indicated that training should be one of the organisation's first priorities to change people's attitudes, improve their understanding and support their loyalty when being part of this process.

Thus, in case A there was no influence on gathering information on training, while in case B training was influenced by gathering information.

6.1.3.3 Training and Taking Action

In case A the ones who were responsible for taking action regarding TQM implementation were the hospital manager and the board members, the staff only participate in implement this action, however, they have no right to make they own action. One of the board members and the quality manager stated, *"The staff are not interested in holding authority, as there is little support offered if staff make incorrect or ineffective decisions"*. While in case B, most of the hospital staff participated in decision-making and taking action regarding this decision. This finding supports what was highlighted by Matías-Reche *et al.* (2008) who indicated that, in decentralised decision-making, most of the staff would be involved in making decisions when they have sufficient training.

6.1.3.4 Training and Monitoring and Evaluating

In case A, according to the interviewees' responses, monitoring and evaluating the implementation's progress were related to the GD, even if the staff were qualified to do the evaluation, the GD did not support this. In case B, the monitoring and evaluating was referred back to the hospital management, which encouraged the hospital to use an external consultant to help with this issue, especially at the beginning of the TQM implementation. This finding is not in line with de Klerk (1994b) who indicated that it does not matter which sector the organisation is working in, staff need the training to be more qualified to make decisions regardless of the context. However, the quality manager and one of the board members in case B stated, *"The hospital did not follow any policy regarding bad outcomes of training programmes, as nobody would be punished for this before"*. If the hospital keep following this kind of policy, that is will lead to lack the staff interesting in training programmes. As there is no point to do training if the hospital do not find any change after the training programmes.

6.1.3.5 Section Summary

Apparently, training was not influenced by the whole of the decision-making process especially in case A. The table 6.3 below summarised the comparison between the two cases regarding the training.

Table 6.3 A comparison of the Training in the two cases

Training in Centralised case	Training in Decentralised case
Training department do not put in consideration the staff opinions and suggestions	Staff participate in these programmes in addition to suggest it.
Gathering information is the training department responsibility	Each department could help in gathering information, in addition to the training department and quality committee.
Staff implement what the top management already decided; however, they have no right to make their own actions.	Staff be part of the whole process.
Monitoring and evaluation the hospital is not belong to the hospital management alone even when the staff qualified and trained,	The hospital has the freedom to ask for external help regarding training programmes, in addition the freedom to do this by their own.

The figure below shows which decision-making process influence on the Training.

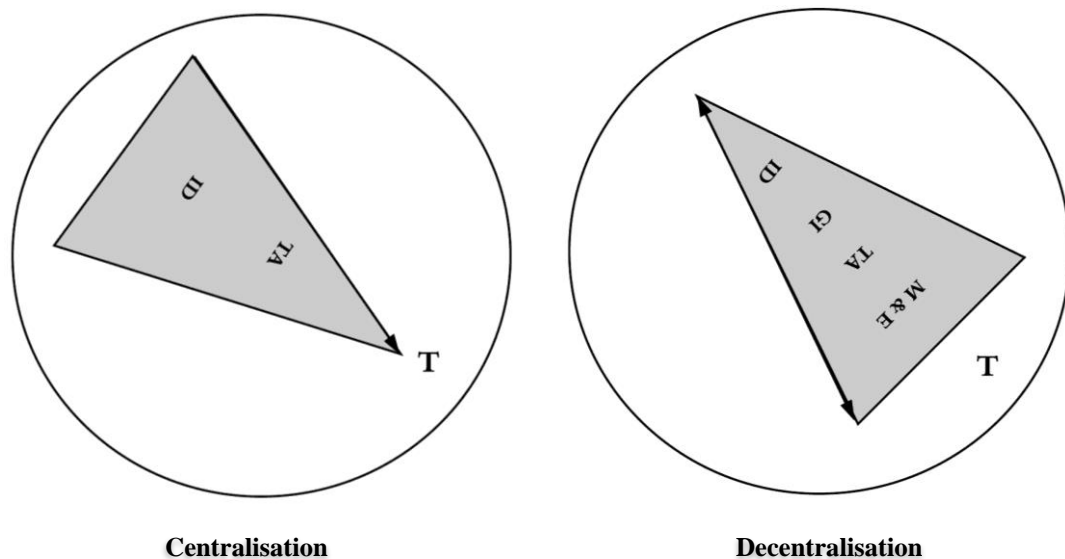


Figure 6.3 the influence of the decision-making process on Training

6.1.4 Employee Empowerment and the decision-making process

Employee Empowerment (EE) is one of the main factors of TQM implementation, as EE helps organisations to develop employee satisfaction. In addition, when staff do not have

empowerment, then they cannot make any change or progress in the organisation's performance (Arsić *et al.*, 2012, Jamali *et al.*, 2010, Latif, 2014). The Table 6.4 (p.122) summarised the comparison of the EE in the two cases.

6.1.4.1 EE and identifying the decision to be made

The staff in case A did not mind being empowered because they wanted to prove themselves to the hospital management, as most of the interviewees responded; however, two of the interviewees mentioned that staff were not interested in being empowered anymore, as none of the staff would support you if the decision you made was wrong. This finding was consistent with what was mentioned by authors such as Dedy *et al.* (2016), Emmert and Taher (2002), Eskildsen *et al.* (2004a), Lakhe and Mohanty (1995) and Martensen and Gronholdt (2001) who indicated that, SM support to the staff who are empowered leads to being them willing to accept this empowerment; however, in case A, the hospital management was just following the GD's rules and did not give attention to the staff's opinions, so none of the staff were interested in being empowered. The quality manager stated, *"The staff realised there is point to be empowered, as there is little support offered if staff make incorrect or ineffective decisions"*. Furthermore, the GD in this case kept a high level of centralisation in decision-making, so the hospital could not offer the staff to have the authority, while this authority belonged to the GD not to the hospital management.

In case B, department managers were responsible for empowering the staff to make a decision. SM supported the employees' decisions, except decisions that were related to financial issues, as these kinds of decisions needed to be approved by the hospital manager or the departments' managers. Furthermore, SM supported the idea that the staff were happy to be empowered to make a decision. This finding is in line with what was mentioned by Emmanuel and Damachi (2015) who indicated that organisation management need to consider that human's seek to be empowered to make a decision and this empowerment inspires them to achieve the organisation's goals and create an effective commitment to the organisation.

6.1.4.2 EE and Gathering Information

In the two cases, information was gathered by means of face-to-face interaction and through a survey. The ones who were empowered and responsible for gathering information regarding the TQM implementation were the quality committee in case A, as

this committee knew better than others which information was needed; however, in case B the departments' managers could be part of this process. This finding was in line with what was mentioned by Taylor (2013) and Cooke (1991) who indicated that to make a decision staff need to collect the required information, in addition to know what is the best source to get this information and by whom. That is why the hospital manager asked the quality committee to be responsible for gathering the required information, as they knew better than other staff which information was needed and how to collect it.

6.1.4.3 EE and Taking Action

Arsić *et al.* (2012) indicated that, when staff are not empowered to make a decision, they could not make any change or progress in the organisation's performance. This is what was found in case A, as the GD did not empower the staff to make decisions regarding the TQM implementation, but at the same time, the GD asked the hospital management to implement TQM, which left the hospital in a difficult situation. As an example for the limited authority of the hospital, one of the interviewees mentioned that *"to get approval from the GD to buy new medical equipment for a specific thing, that took about 7 month not because there was no funds available, but this is how the routine worked."*

In case B staff did not suffer from this issue, as they were widely empowered to make decisions and the hospital management supported these decisions. This finding was consistent with Men (2011) and Alexander (2015) who concluded that empowerment in a decentralised system is often at a high level. Furthermore, Hajjar *et al.* (2012) revealed that an important aspect of empowerment is that staff from the local management are able to make decisions without asking to get approval from others, this more likely to happen in decentralised communities.

6.1.4.4 EE and Monitoring and Evaluating

The GD kept a high level of centralisation in decision-making, which left the hospital with limited authority to make decisions, as the staff already knew that the task of monitoring and evaluating the implementation belong to the GD, not to the hospital management. Furthermore, the hospital management usually needed to wait for GD approval, which could take an extended period of time; however, the hospital management could not do anything regarding that, other than to request if it was possible that the GD could make a swift decision. While in case B, the hospital worked with a high

level of decentralised decision-making, so the hospital has the empowerment to monitor and evaluate the hospital progress regarding TQM implementation.

6.1.4.5 Section summary

Basically, there was a differentiation in the EE in the two cases, and the table 6.4 below summarised this.

Table 6.4 A comparison of EE in the two cases

EE in Centralised Case	EE in Decentralised Case
There is no more empowerment in this case, and the staff do not like to be empowered, as they believe the hospital management will not support them if the decision they made were wrong.	SM supporting staff opinions and decisions with only one exception, which is the decisions related to financial issues, as the hospital manager approval, need in this case.
Quality committee is the one who responsible to request which information is needed.	In addition to the quality committee, the departments' managers be part of this process, which means there are more staff involve in this process.
Staff did not empowered to make a decision; however, they do try their best to implement what the GD asking to be implemented.	Staff are widely empowered to make decisions.
Monitoring and evaluation the hospital progress is belonged to the GD, so the staff do not empowered to this by his own.	The hospital has the empowerment to monitoring and evaluating the whole process.

The figure below show the differences of which process of the decision-making influence on EE in the two cases.

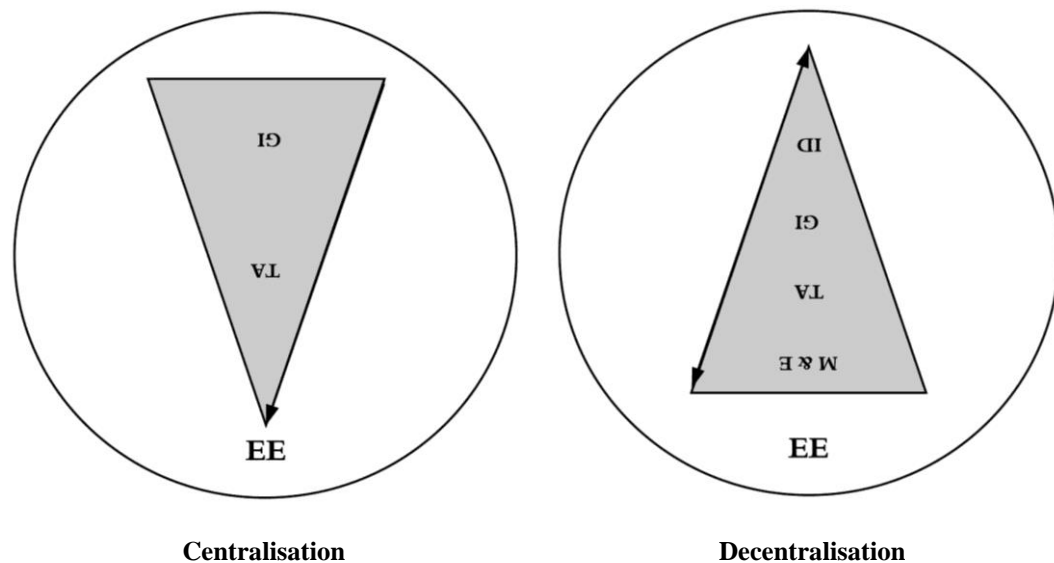


Figure 6.4 The influence of the decision-making process on EE

6.1.5 Continuous Improvement (CI) and the decision-making process

CI is one of the key factors for successful TQM implementation, as this factor is looking to integrate the staff's efforts to gain a competitive advantage (Ajmal *et al.*, 2016, Chang *et al.*, 2015, Guerra *et al.*, 2015, Lakhe and Mohanty, 1995, Nawelwa *et al.*, 2015, Prajogo and Cooper, 2010, Zeng *et al.*, 2015). The Table 6.5 (p.124) summarised the CI comparison in the two cases.

6.1.5.1 CI and identifying the decision to be made

Across the two cases, the hospital manager and the board members were responsible for choosing which method would be implemented for continual improvement; however, in case B the departments' managers participated in this process, in addition to the quality committee. This finding was in line with Ah-Teck and Starr (2014) who indicated that effective change happens when all stakeholders are rightfully engaged in decision-making processes. One of the interviewees in case A indicated that employees tried to secure themselves when many members of staff involved in making decision.

6.1.5.2 CI and Gathering Information

In case A, most of the staff did not have any idea about CI, as there was no training about it and the reason for this was that the hospital did not have a fund for this kind of training; however, staff were informed regard which method would be implemented in case B, in addition to explain the reason form this method and the ones who did this the departments' managers. Furthermore, the staff were asked about their opinion regarding the CI method by face-to-face meeting. This supported the view of Parumasur and Govender (2013) who indicated that CI needs to be followed by continuous top management support, training and teamwork.

6.1.5.3 CI and Taking Action

In case A, when the hospital management chose a method to be implemented for CI, none of the SM would offer an explanation as to why this method was chosen or if there was another method that could be implemented, because the ones responsible for selecting the CI method were the top management. This finding was consistent with Alexander (2015) who indicated that in a centralised structure, organisations keep decision-making firmly at the top of the hierarchy among most of the SM.

In case B the SM informed staff about which CI method would be implemented and SM did this because they believed that would help to improve the TQM implementation. In addition, the hospital management already had the authority to make decisions regarding any problem they faced; however, one of the interviewees mentioned that there were some issues the hospital management asked for the GD permission. The researcher found some documents, which supported this view, which were formal letters between the hospital management and the GD at the beginning of the TQM implementation, asking the GD how to deal with some issues rather than to get permission to do it. The finding in case B was in line with Bouraoui and Lizarralde (2013) who concluded that decentralised decisions optimise the efficiency of local management and offer appropriate distribution of responsibility.

6.1.5.4 CI and Monitoring and Evaluating

In case A, the hospital management would hold board meetings to monitor and evaluate the CI methods, and the result of this meeting or the evaluation reports were then sent to the GD. In case B, the hospital management were responsible for this evaluation, and the hospital was looking to implement TQM effectively- this is one of the primary reasons that external consultant help is sought. This finding was consistent with Talib et al. (2011a) who argue that CI do not let organisations accept the minimum qualification or standards, but they will try to do best they can with the available resources.

6.1.5.5 Section Summary

The two cases had CI, and they had different processes to choose which method was better to be implemented. The table 6.5 below summarised the CI comparison in the two cases.

Table 6.5 A comparison of CI in the two cases

CI in Centralised Case	CI in Decentralised Case
It was not encouraged that many people participated to make a decision, as they wanted to secure themselves in case any problems occurred.	The hospital management believed this kind of participation enhanced the TQM implementation outcomes.
Choosing the CI methods is strict to the hospital manager and the hospital board of directorate.	The departments' manager and the quality committee participate in this process in addition to the hospital manager and the board members.

Staff did not have any idea about the CI methods, as there was not training regarding that happened,	Staff were informed regard which method would be implemented, in addition to know the reason form this method.
The hospital management discuss monitoring and evaluating the CI methods through a board meetings, and the result of this meeting or the evaluation reports were then sent to the GD	The hospital management were responsible for this evaluation, and ask for the external consultant help was the one of the main reasons to do this.

The figure below shows which process of the decision-making influence on CI.

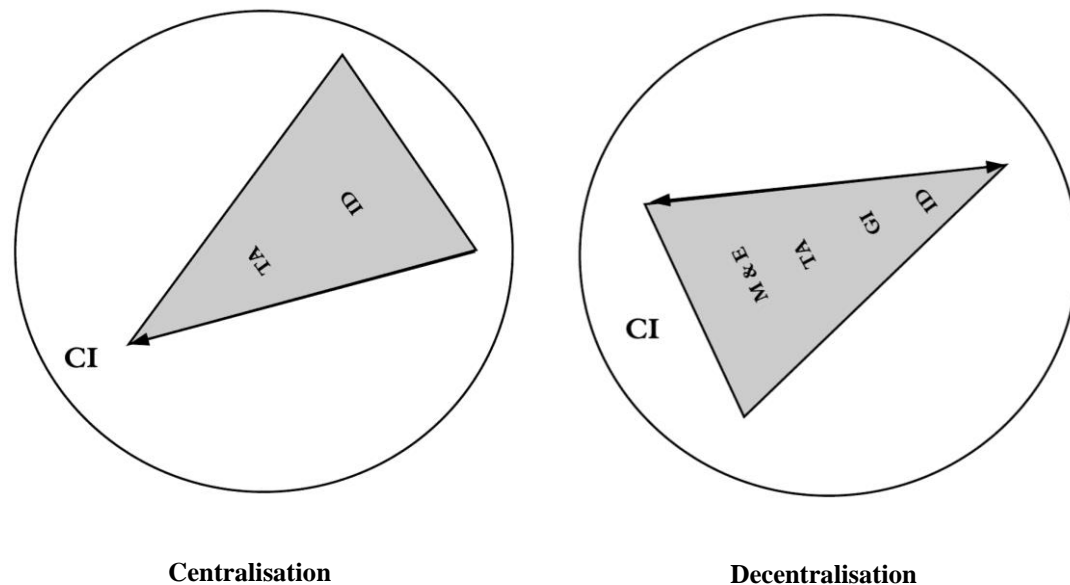


Figure 6.5 The influence of the decision-making process on CI

6.1.6 Communication and the decision-making process

Firlar (2010) concluded that successful implementation of TQM needs business to be competitive in light of the global competitive environment and communication will increase the power of the organisation. In addition, organisations, which have appropriate communication system that can, help to facilitate the decision-making process and achieve the organisation's goals effectively (Dayton, 2001, Jianu *et al.*, 2013, Johansson, 2007, Musenze *et al.*, 2014). The Table 6.6 (p.127) summarised the comparison of the communication in the two cases.

6.1.6.1 Communication and identifying the decision to be made

In case A, a board meeting was held on 27th May 2014 to set the communication plan. This plan stipulated that a report should be sent to the GD every three months, in order to inform them of any progress or changes regarding TQM implementation. In case B, the

hospital management set the communication plan to link all hospital departments with each other, this plan was set in early months of 2014. The finding in case B was consistent with Talib *et al.* (2013) who indicated that organisations need an effective communication system between the top management and all staff in different organisation sections, in order to improve the organisation process.

6.1.6.2 Communication and Gathering Information

In case A, the hospital collected the information from each of the departments before sending the final reports to the GD. In case B, the hospital established a database to include any information could help the TQM implementation. This database helped to get information faster and reduced time wasted searching for something already did search about it. In addition, kept the whole staff informed about the hospital progress. This finding was in line with Samuelsson and Nilsson (2002) who concluded that communication is considered as a tool to keep staff commitment, in addition to informed them about the organisation goals and the process to reach these goals.

6.1.6.3 Communication and Taking Action

In case A, there was no further action taken regarding this step, as the hospital management would just collect the departments' reports and send it to the GD; however, in case B the hospital management considered the communication as an important factor, to keep the staff up to date with the whole system in the hospital. This finding was consistent with Holt *et al.*, (2007) who revealed that, the wide range of staff access to information would help them to understand the programme change and the final objectives better.

6.1.6.4 Communication and Monitoring and Evaluating

In case A, the reason for sending the hospital progress report to the GD every three months was to monitor and evaluate the TQM implementation. Whilst in case B, each department manager responsible to evaluate the department who was responsible for, then sent this report to the quality committee to save it in the database, so, if the hospital management need to evaluate any department, would be easier to follow the department progress by using this database. This finding was in line with Alexander (2015) who indicated that, in decentralised management staff have more empowerment, which is help to use the information technology and then in turn help to fall in cost of the communication.

6.1.6.5 Section Summary

Each of the two cases had a communication plan; however, there were a differentiation between the two cases. The table 6.6 below summarised the comparison between the two cases.

Table 6.6 A comparison of the Communication in the two cases

Communication in Centralised Case	Communication in Decentralised Case
The hospital set a communication plan which stipulated to send a reports every three months to the GD.	The hospital set the communication plan to link the hospital departments with each other.
The hospital management collect the required information from each departments to send it to the GD.	The hospital establish a database help to get the required information easily, and help to evaluate the hospital progress.
No more actions taken, as the communication channel did authorised the staff to make more decisions.	The hospital management consider the communication as an important factor, which helps to keep the staff up to date with the implementation process.

The figure below shows which process of the decision-making process influence on the communication.

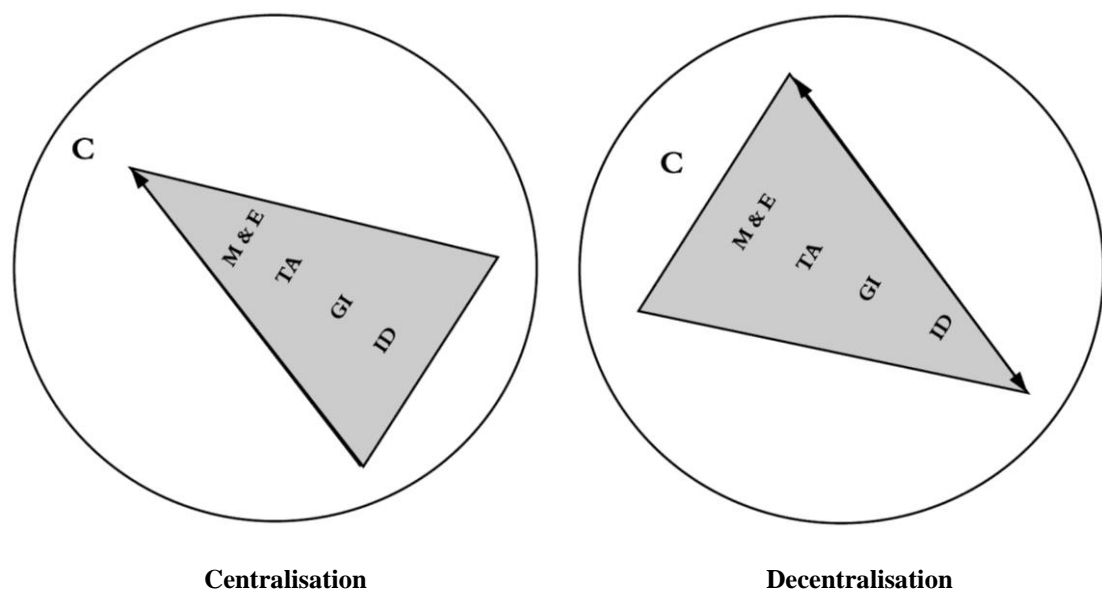


Figure 6.6 The influence of the decision-making process on Communication

6.2 Discussion of the Theoretical Framework

The two cases started to implement TQM during the same period, which was in 2014; however, it would appear that there was a differentiation in centralised and decentralised

decision-making influence on the CSFs of TQM implementation. The author had already structured the theoretical framework based on centralised and decentralised decision-making and how the decision-making process influenced the six CSFs of TQM implementation. The public hospitals are working with a high level of centralisation in decision-making, while the private hospitals are working with a high level of decentralisation.

Based on the previous sections in this chapter (section 6.1), the decision-making steps had an influence on the CSFs of TQM implementation; however, there are some similarities and some differences with the theoretical framework, which were related to the centralised and decentralised decision-making. These similarities and differences will help the researcher to amend the theoretical framework, which helps to answer the research question (*How does centralised or decentralised decision-making influence TQM implementation factors?*). The next subsections explained these similarities and differences.

6.2.1 The Similarities

On examination of the two cases, the main similarity can be drawn from the ‘taking action’ step of the process. In both cases, this step had influence on all of the CSFs, while the rest of the decision-making step influenced the CSFs differently. The next subsections will explain these similarities further:

6.2.1.1 The similarities in SMC

Within a centralised system, SMC was influenced by three of the decision-making steps: identification of the decision to be made, taking action and monitoring and evaluating; however, in decentralised system, in addition to these steps, SMC was influenced by gathering information. The reason for these similarities, despite the limitation of the hospital authority in the centralised case, is that the SM still have the authority to make a decision, so they are the ones who can identify a decision and taking action regarding TQM implementation, in addition to monitoring and evaluating the hospital progress in the implementation. This is in line with what was mentioned by Meyer and Hammerschmid (2010) who concluded that the commitment of the SM was not affected that much by centralised and decentralised approach, as they still have the power and the authority to make decisions.

6.2.1.2 The similarities in Identification and choice alternatives

The two cases did not consider identification and choice alternatives for any decision, so these two steps were excluded from the two cases. In the literature these two steps considered as an important steps for the decision-making, as it's give organisations flexibility to get effective outcomes and minimise time wasted in consider another solution (Gregory *et al.*, 2012, Jennings, 1994, Stockall and Dennis, 2015). However, the two cases not put into consideration these two steps, even the decentralised case, which have the authority to do this, did not reflect these steps.

6.2.1.3 The similarities in Staff Involvement

Staff involvement was influenced by gathering information and taking action in the two cases (centralised and decentralised). In decentralised case, staff involvement was influence by two steps - identifying the decision to be made and monitoring and evaluating. In the centralised case, the GD are largely responsible for most of the decision-making, with additional input from the SM; however, there was still a small number of additional staff responsible for gathering the required information to make the decision, in addition to the responsibility of fulfilling what the GD or the SM asked them to implement regarding the TQM implementation. This example is in line with Maringe (2012) who concluded that when the hierarchical level is high, then a small number of staff will be allowed to participate in decision-making processes.

6.2.1.4 The similarities in Training

In both cases, training was influenced by taking action. In the centralised case, all members of staff taking part were required to enrol in training programmes regarding TQM implementation; however, in reality, training was very limited in this case, as the GD opted only to focus on the training of top management. In the literature, training was clearly seen as a key factor in effective implementation in order to affect staff knowledge and attitudes (Jamali *et al.*, 2010, Jiménez-Jiménez *et al.*, 2015, Kassicieh and Yourstone, 1998). The centralised case was inconsistent with what was mentioned in the literature, as the hospital management did not consider training as an important factor for the implementation. The interesting point in the centralised sector that the staff considered themselves as experts and they do not need training, and that is why they do not like to enrol in these programmes.

6.2.1.5 The similarities in Employee Empowerment

Two steps - gathering information and taking action - had an impact on employee empowerment in both cases; however, in the decentralised case, employee empowerment was also influenced by a further two steps - identification of the decision to be made and monitoring and evaluating. In each case, the quality committee were responsible for gathering the required information. Moreover, during the taking action step, staff were also part of the process. In the centralised case, they followed the GD rules, while in decentralised case, staff followed what the hospital manager and the department manager asked them to follow. This findings is inconsistent with what were Mensah *et al.* (2012) and (Mosadeghrad, 2013) mentioned, that because employees who are in a direct contact with products or services, so, supposed to be they are empowered and well equipped with the knowledge to get a desirable outcome. While in the centralised case, staff just followed the GD rules, who is not in contact with the reality.

6.2.1.6 The similarities in Continual Improvement

In each case, continual improvement was influenced by identify the decision to be made and taking action. The hospital manager and board members were responsible for deciding which method would be implemented and which action taken regarding this method; however, in the decentralised case, the departments' managers could be part of this process.

In the literature, CI is one of the key factors for successful TQM implementation, as many authors were mentioned (Ajmal *et al.*, 2016, Chang *et al.*, 2015, Guerra *et al.*, 2015, Lakhe and Mohanty, 1995, Nawelwa *et al.*, 2015, Prajogo and Cooper, 2010, Zeng *et al.*, 2015) as the process of the implementation is about continuous improvement. While in centralised case, staff do not have the right and even the knowledge to be part of this process, as this refer back to the hospital manager and the board members authority.

6.2.1.7 The similarities in Communication

Communication was influenced by all of the decision-making steps in the two cases, as the hospital management set the communication plan in order to monitor and evaluate the TQM implementation progress; however, in centralised case the GD shared this responsibility with the hospital management. Furthermore, the two cases have a good

communication channel, wheatear with the GD in the centralised case, or between the hospital management and each department in decentralised case.

6.2.2 The Differences

The next subsections will explain the differences between the two cases in light of the findings of this study and the theoretical framework.

6.2.2.1 Differences in SMC

SMC was gained from the early steps of the TQM implementation; however, the hospital in decentralised side did more to gain this commitment than centralised one, for example, by initiating different training programmes or seeking assistance from an external consultant. On the centralised side, SM were responsible for deciding which information was needed and in some cases the GD intervened in the required information, but the main party who was responsible for gathering this information was the quality committee. Contrastingly, in the decentralised case, the SM participated in gathering information. Furthermore, monitoring and evaluating the implementation progress was referred back to the hospital management in decentralised case, whilst it was the GD's responsibility in centralised case.

Thus, SMC in the two cases was influenced by the decision-making steps, with few differences between the two cases, such as the flexibility of redefining the problem and monitor and evaluate the hospital progress. In addition, on many issues the hospital management in centralised side need to seek approval from the GD to implement the decision, whilst this was not an option on the decentralised side.

6.2.2.2 Differences in Staff Involvement (SI)

At the beginning of the TQM implementation no more SI in centralised side, as the GD focused just on the high level of the hospital management. In addition, staff in the centralised case were only permitted to follow rules set by the GD, while in the decentralised one they had the ability to participate freely in decision-making process. Hospital management in the decentralised case encouraged staff to be part of the implementation process, and tried to explain to them the benefits from the TQM implementation. In the centralised case, however, meetings were held just for the SM - implementation benefits were not explained to the staff. Moreover, gathering the information in centralised case is happened under the GD supervision, while in

decentralised case the hospital manager, the quality manager and the quality committee all these staff participated in this process.

Thus, SI was influenced by all four of the decision-making steps in the decentralised case. On the centralised side, there were few examples of SI - staff were part of the information gathering process, but this was decided by the SM. They also had no authority to identify which decisions had to be made – therefore, the staff were merely a part of implementing the decisions taken by the SM or the GD.

6.2.2.3 Differences in Training

In the decentralised case, staff had some input in the means of implementation training. They could suggest and plan for training programmes and even conduct these programmes for other members of staff – an example of this being when the quality committee conducted workshops for the staff to explain the TQM implementation benefits. On the centralised side, suggestion for training programmes were indeed made by the staff, but most of the time these suggestions did not go further, as the GD did not consider staff opinions to hold great importance. In addition, in each case it was required that members of staff participated in gathering information needed for training programmes, however, in reality, this was not seen in centralised case. Furthermore, GD were in charge of monitoring and evaluation of hospital progress in the centralised case, whilst this role was undertaken by the hospital management on the decentralised side. Thus, training was influenced by all of the decision-making steps in the decentralised case, whilst in centralised case, training was only influenced by identifying the decision (even though there was no evidence for this just the interviewees' responses) and taking action.

6.2.2.4 Differences in Employee Empowerment (EE)

In the centralised case, the hospital management suffered a lack of empowerment from the limitations placed over their authority – even when the staff did not wish to be empowered, the hospital could not offer it as the GD retained a high level of centralisation in all decision-making.

Contrastingly, there was no limitation to hospital authority in decentralised case - department managers had the power to authorise their staff to make decisions. In the literature, Arsić *et al.* (2012) indicated that, when staff do not empower to make a

decision, the staff cannot make any change in the organisation performance. This exactly what occurred in centralised case, as the GD did not empower staff to make decisions - whilst in decentralised case, staff were able to affect change and improve performance.

In the same context, monitoring and evaluation of the hospital progress was not the responsibility of the hospital management alone on the centralised side, as they were required to send regular evaluation reports to the GD to evaluate it.

6.2.2.5 Differences in Continual Improvement (CI)

There are also differences between the two cases in regards to CI, in which members of staff participated to choose the CI method. In the centralised case, the staff involved wanted to secure themselves when many other members of staff were involved in this process; however, on the decentralised side, the hospital management believed this was better than an individual decision and staff would accept more responsibility to implement this decision. Furthermore, employees in the centralised case did not know much about the CI methods, and top management did not try to explain more to the staff in order to help them understand these methods better – this left the staff with no option other than to implement whatever the top management decided.

6.2.2.6 Differences in Communication

Each of the two cases followed a set communication plan. In centralised case, the hospital management sent the hospital evaluation reports every three months to the GD – hence, the main reason for the communication plan was to keep the GD up to date with the hospital progress. In the decentralised case, the main reason to set a communication plan was to link the hospital departments together by using a database in which to save the gathered information; however, in the centralised case, the hospital sent all information to the GD, to facilitate monitoring and evaluation of the hospital progress regarding TQM implementation.

In addition, the hospital management on the centralised side kept a high level of communication with the GD, as the hospital was required to ask for the GD permission on a variety of issues. This in contrary to what has been mentioned by Michel (2007), Bazarova and Hancock (2012), Ceschi *et al.* (2014) and Servaes (2009) who each indicated that organisations with an effective communication channel allow for further understanding and employee empowerment – this, in turn, permits them to make a

decision. As a contrast, in the centralised case, the hospital had a high level of communication with the GD, but that did not empower the staff to make decisions.

6.2.3 Explanation of the Theoretical Framework

The theoretical framework was revisited in light of the findings from the case studies. The decision-making steps that were in the theoretical framework derived from the literature, but did not appear to have an influence on the six CSFs of TQM implementation in the cases have been removed from the amended framework.

According to the differentiation of the influences of the decision-making process on each of the CSFs, which the previous figures in this chapter have been shown, therefore, some amendments in the final theoretical framework were made according to these findings (see Figure 6.7). In addition, the findings chapter revealed that there were a differentiation in the activity of the CSFs, and some of these factors had been higher in decentralised case rather than the centralised one, such as SMC, SI, training and communication. While, there was no difference in the CI between the two cases, as there was no evidence, which sector more active than the other was regrading this factor.

As shown in the initial framework, there were differences in the way of how the decision-making process have been implemented in the two sectors. In the centralised case, the time to identify the problem was longer than to make any action regarding the problem. While, it's the opposite in the decentralised case, as the time to identify the problem was shorter, but the time to make action regarding that was longer, and that because there were many people have been authorised to make action, and to reconciliation between them that need time longer than the centralised case. The bounded rationality in centralised case is goes less when the staff try to reach the top. However, in decentralised case, the bounded rationality is goes higher when the staff try to reach the final step of the decision-making process.

In addition, the study realised the decision-making process in centralised case is working in one direction, because staff deal with it as orders, so even when there was lack of the information, there was no possibility to back and gather more information. While, in decentralised case staff had this flexibility, and that is what the arrows in two directions meant.

Each case has its own negativity and positivity regarding the way of making decision. The best managerial process to follow is the contingency between centralised and

decentralised system. As in this situation, hospitals can devoid the delay in identify the problem, like what happened in centralised case, whilst in decentralised case the delay happened in taking action regarding the problem have been identified earlier. In addition, to benefit from the bounded rationality concept by using the time in an active way, which in turns mean staff can benefit from the hospital resources effectively.

Thus, the contingency between the centralised and decentralised system is necessary in the healthcare sector, as the delay in identified the problem or in making action regarding it, may cost a patient life. The Figure 6.7 below explained how the contingency between the centralised and decentralised decision-making are necessary in the healthcare sector, which the researcher called it the TQM clock.

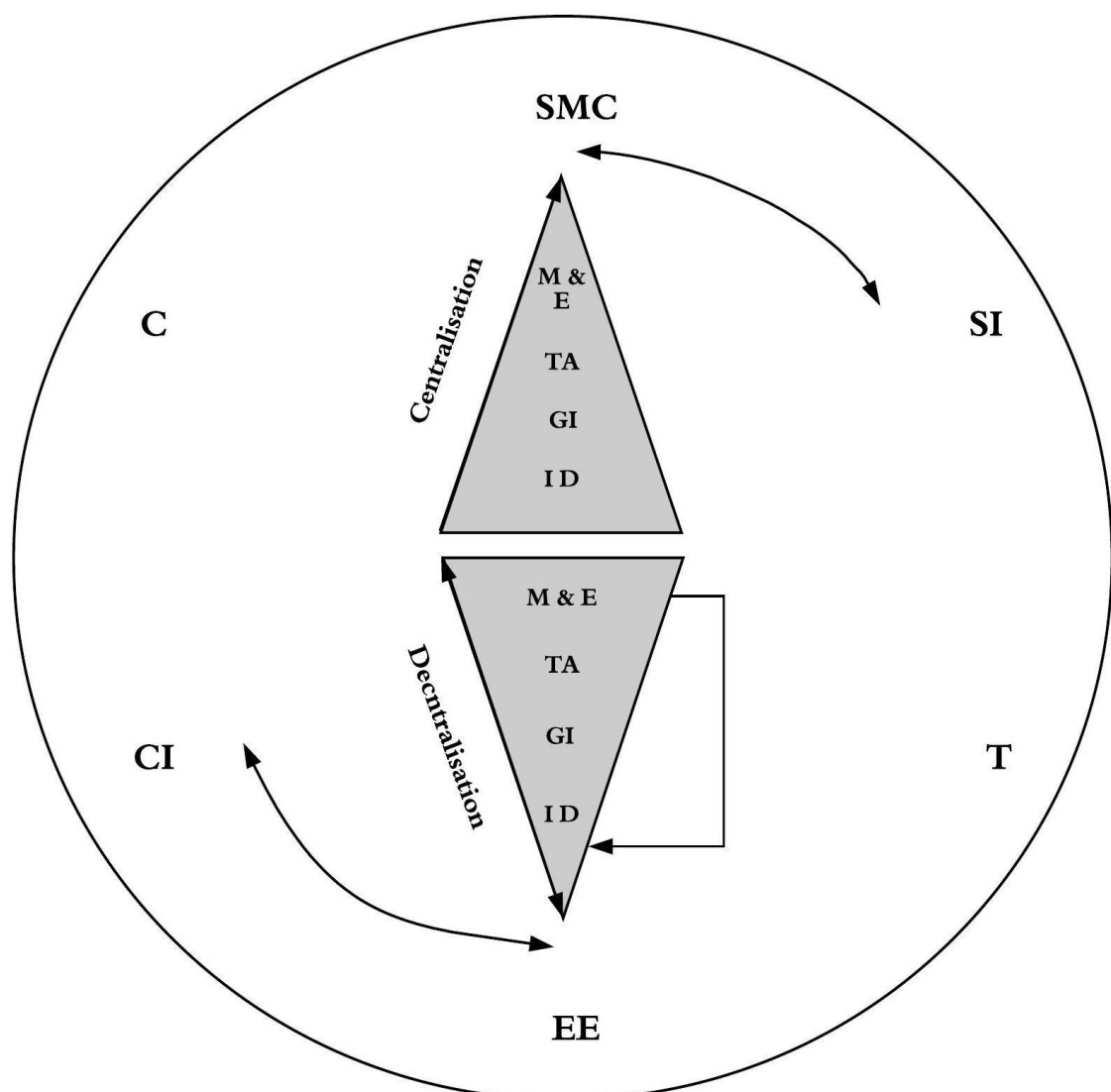


Figure 6.7 Theoretical Framework of how decision-making influence the CSFs of TQM implementation (The TQM clock)

6.3 Critical Discussion on the conduct of the Research and Research Methodology

The choice of research strategy was justified in chapter four (section 4.3, p. 74) and the author clarified that the most suitable strategy was the case study strategy. Case study research can answer questions like how and why (Collis and Hussey, 2009, Creswell and Plano Clark, 2009, Easterby-Smith *et al.*, 2012, Yin, 2014), which were asked in this study.

The choice of appropriate case studies was explained in chapter four (section 4.4, p. 76). The reason from choose two case studies is the study try to explore how the centralisation and decentralisation of decision-making influence TQM implementation factors. So, the author choose one case from the public sector, which is follow the centralisation in decision-making and one from the private sector, which is follow the decentralisation in decision-making. Yin (2014) states that similar cases will help to show if the theory can be generalised and dissimilar cases will help to extend or modify any theory. The two cases were dissimilar in this research, although both cases were from the same industry, but each case is from a different sector as one is from the public sector and one from the private sector.

Multiple sources of evidence were selected in order to triangulate the data as recommended by Yin (2014). These sources were interviews, documents, and archival records. The author is confident that enough sources of evidence were accessed to provide the validity.

Considerable time and efforts were spent to develop the data collection methods, instruments and methods of data analysis. This ensured that a chain of evidence was maintained from the original research question through to the ultimate conclusions of the study as recommended by Yin (2014). The main source for providing this was the theoretical framework. The data collection instruments were the documents, which were used to gather background information on the case studies, the interview structure / the protocol and the interviewees' responses. All these processes were reviewed by the researcher supervisor Professor John Davies, who has much experience in TQM implementation. Furthermore, the researcher did a pilot interviews with three members of staff from the two cases, these pilot interviews help the researcher to amend the interview questions to make it more understandable for the interviewees, moreover, they suggested few things which enrich the study. This provided a substantive check for the

interview questions content, in addition to covering methodological issues in the protocols and interview questions (Yin, 2014).

The interviews went smoothly and as scheduled with very little explanation needed from the author. Unfortunately, some of the interviewees could not remember the accurate times for specific issues; however, the availability of the documents enabled the author to confirm these issues.

The interviews were transcribed by the author and sent back to the interviewees for verification. The author managed to get positive verification from all of the 24 interviews.

6.4 Limitations of the Research

During the period of the research, efforts were made to ensure the collection of high-quality data to answer the research questions and achieve the research aim and objectives. Nevertheless, every piece of research has its limitations by the constraints placed upon the researcher (Yin, 2014), and this study is no exception. It is important to consider these as limitations, which have the potential to impact on the conclusions that can be drawn.

These limitations are:

- This research has been restricted to only two cases, one from the public sector and one from the private sector, so the generalisation of the findings is limited to the theory.
- The researcher collected the data from four cases at the beginning, two from the public sector, and two from the private sector. Then, one of the private sector cases asked to be excluded from the study. To make a balance between the two sectors, the researcher decided to exclude one of the public sector cases, to do the study with one case from the public sector and one case from the private sector. This was one of the study's difficulties, as it was not easy to get approval to do the study.
- The number of the interviews was very limited because it was not possible to interview staff from lower levels in the hierarchy of the case study as they had had insufficient involvement in the implementation processes, in addition, they have no authority to make decisions.
- Some of the documents were restricted to the case study hospital and the researcher was only able to peruse them on the premises, as it was not possible to get copies.

- Some of the interviewees refused to have their interview recorded, for cultural and personal reasons. This could have resulted in missing important information, so the researcher tried to write as much as possible during the interview and then immediately afterwards, devoted sufficient time to record all information and ideas while they were easy to remember.
- The researcher may be influenced by the personal views of the scholar (Huberman and Miles, 1994, Yin, 2014), so any potential shortcoming in this study may be the result of bias (Easterby-Smith *et al.*, 2012). This limitation was considered during the data collection and analysis, and the efforts to avoid bias in the data collection phase were explained in (section 4.5.2, p.78), as the researcher collected a multiple source of evidence.
- A large amount of data collection during the interviews may lead to missing important information or the over-weighting of some findings, due to focusing on particular issues and neglecting others, which may have been important (Saunders *et al.*, 2007). This limitation was addressed by maintaining a chain of evidence and the main vehicle for providing this was the theoretical framework.
- The theoretical framework had limitation to answer the how and why research questions, as the framework succeed to answer the how question, while the why question was answered by the interviewees responses.
- During the interviews, the researcher may give out unconscious signals/clues that guide respondents to give the answers expected by the researcher (Huberman and Miles, 1994). This was avoided as much as possible by the researcher keeping himself neutral and giving the interviewees sovereignty to answer the questions (Saunders *et al.*, 2007), such as the researcher tried to avoid the body language signs or heading the answers.
- While interviewing the respondents, the researcher had no way to know whether they were being truthful or otherwise. Respondents may not consciously conceal information, but may have imperfect recall. This could be one of the limitations of the research; however, to minimise this, other sources of data were used for triangulation.

6.5 Chapter summary

In this chapter, the findings from the two cases were discussed in the light of the literature. The theoretical framework was revisited with consideration of the findings from the case studies and as a result, amendments were made to the framework. Thus, the outcomes of this chapter contributed to achieving the objectives:

RO2. *To explore how centralised and decentralised decision-making influence TQM implementation factors in Iraqi hospitals.*

RO3. *To understand why centralised and decentralised decision-making influence TQM implementation factors in Iraqi hospitals.*

RO4. *To develop a conceptual framework that helps understand the influence of decision making approaches and processes on TQM implementation factors in Iraqi hospitals.*

The next chapter will describe the achievement of the research aim and objectives. In addition, to providing the conclusions and recommendations for future research.

Chapter Seven

Conclusions and Recommendations

Chapter 7 Conclusions and Recommendations

7.0 Chapter Introduction

This final chapter endeavours to bring together and summarise the conclusions and major findings of the study. This chapter contains revisiting the aim of this study, the objectives, and the research questions. It also contains the contributions to knowledge and practice, recommendations for further research have been made in this chapter.

7.1 Conclusions

This section demonstrates how the aim and objectives of the study have been achieved. Moreover, answers to the research questions are provided.

7.1.1 Meeting the aim and objectives, and answering the research questions

The research questions in section 1.3.3 were answered by achieving the aim and objectives of the study. The aim of this research was “*to identify how decision-making influences TQM implementation factors in hospitals in Iraq*”. This aim has been accomplished effectively by addressing the research objectives as follows:

The first objective was “*to critically review and synthesise the relevant literature on TQM implementation factors and decision-making*”. This objective was achieved by synthesis the critical literature review (Chapter Two & Three). The literature covered issues related to TQM implementation and decision-making processes, this being the synthesise for the critical success factors of TQM implementation, illustrate centralised and decentralised decision-making, decision-making process models were reviewed, and how decision-making process influence each of the six CSFs of TQM implementation were listed and illustrated. Thus, the first objective was effectively achieved.

The second and third objectives were:

- *To explore how centralised and decentralised decision-making influence TQM implementation factors in Iraqi hospitals.*
- *To understand why centralised and decentralised decision-making influence TQM implementation factors in Iraqi hospitals.*

In order to meet these two objectives, two case studies were conducted to gather the relevant and required information about how and why decision-making influenced the TQM implementation. The methods of data collection chosen as appropriate were semi-structured interviews (with hospitals' managers, board members, quality committee managers and quality committee member), following an appropriately prepared interview protocol (Appendix 1). Documents and archival records were used to triangulate the interview findings, which improved the validity of the research. Meeting these objectives was highly dependent on the first objective having been achieved.

These two objectives were to explore and explain how and why the decision-making process influence the six CSFs of TQM implementation in Iraqi hospitals. In order to meet these two objectives, the finding from the case study hospitals analysed using the narrative techniques of pattern matching (see section 4.9, p. 87) to interpret and present the findings in Chapter Five. Further, various documents and archival records were retrieved from the two cases and data triangulation was achieved. Explained for the decision-making process and how and why each of these steps influence each of the 6 CSFs of TQM implementation was happened in Chapter Six. The theoretical framework explained how the decision-making process influenced the CSFs of TQM implementation. In the case of centralisation for instance, the SMC were influenced by identify the decision to be made, taking action and monitoring and evaluating. However, in decentralised case the SMC were influenced by all of the decision-making steps. In centralised case, staff involvement influenced by gathering information and taking action, while in decentralised case all of the decision-making steps influenced staff involvement. Training was influenced by identify the decision to be made and taking action in centralise case, while in decentralised one was influenced by all of the decision-making steps, for more details (see section 6.2.3). The third objective was answered in Chapter Six by explain why the CSFs was influenced or not by the decision-making steps. Thus, this offered the answer the research questions.

Finally, by meeting the research objectives and answer the research questions, the aim of explore how and why decision-making shape the TQM implementation was achieved. The following sections present the contributions made by this study.

7.2 Research Contributions

This research provides additional knowledge at the theoretical and practical level. The results from this thesis have contributed to an increased understanding of how decision-making influence TQM implementation factors. These case studies focus on the differentiation between the centralised and decentralised decision-making in order to explore its influence on the TQM implementation. Furthermore, this research address some important gaps in the literature and contributes to increased understanding of TQM implementation in healthcare sector after war. At present, there is a limited understanding of issues affecting the TQM implementation after war especially in Iraq and this research address this gap.

The following sections present the main academic and practical contributions made by this research.

7.2.1 Theoretical Contributions

The results of this study make a number of theoretical contributions. First this research start with adopted the decision-making process depends on different theories and models. As mentioned in the literature, best decision-making model need to consider four phases, these phases are intelligence phase, choice phase, implementation phase and review phase. This study includes these four phases, which are divided into six steps. Some of the recent studies divided these processes to different numbers, like six, seven, and even eight. The researcher found that some steps were already included into another, such as analysis the alternatives and choose between the alternatives as some authors revealed that when decision makers choose between alternatives should analyse these alternatives first and assumed which outcomes could get (Gregory et al., 2012). While other authors concluded to the possibility of incorporating two steps to be one-step like monitor and evaluate or evaluate alternatives and choose among them like in Slade's model (Cooper and Boyko, 2010). Furthermore, this study considered the combination between the normative theory and the descriptive theory, as the study start with choosing the decision-making process which the hospital supposed to follow (normative theory) and then by the field work tried to understand what the people actually have done (descriptive theory), the combination between these two theories named the perspective theory.

Second, the TQM implementation factors have been used in this study are SMC, SI, training, EE, CI, and communication. These factors are the most common factors, which

influence the TQM implementation (Antony et al., 2002, Arsić et al., 2012, Arumugam et al., 2011, Chang, 2005, Hietschold et al., 2014, Irfan et al., 2014, Jackson, 2001, Lu and Sohal, 1993, Mellahi and Eyuboglu, 2001, Mensah et al., 2012, Sila and Ebrahimpour, 2003, Yusof and Aspinwall, 1999). In addition to consider these factors as the common factors, they have been prioritized according their elasticity towards centralised and/or decentralised decision-making (See Table 2.2, p. 24). Moreover, this study addressed the importance of these factors to the TQM implementation in the healthcare sector with consideration to the public and private sectors. According to that, the author did screening and redefine to the CSFs of TQM implementation and depend on that the literature been structured.

Third, to the best of the author's knowledge, there is not enough attention that has been given to the interaction between decision-making and TQM implementation, with only a few exceptions. Akdere (2011) used a survey to analyse the various decision-making process in the organisation to explore how the members of the decision-making arrive to the quality in the decision through logical sequences of steps. These members were a large number of student who enrolled in decision-making course. While Ah-Teck and Starr (2014) focused on the school's principals use of data and evidence in making decisions for school improvement by use TQM, and that by using mixed method research. None of these studies considered the public vs. private, as the decision-making approach would be different. However, this study used in depth interviews to explore how the decision-making process influence the TQM implementation, in context of the centralised and decentralised decision-making in Iraqi hospitals. One of the main reasons to choose the Iraqi hospitals because of the war, as the exiting literature provides limited information of TQM being used in healthcare sector after war.

Our findings, referred to "*after war national strategy*", as the main reason for following centralised decision-making approach in Iraqi healthcare organisations, especially in the public sector. However, TQM implementation focus on high level of authority and continuous improvement, which needs staff to be authorised to make decision. This was an interesting point to study, as how the Iraqi hospitals implement TQM with this level of centralisation in decision-making.

In addition, one of the important contributions of this research is that it proposes an updated theoretical framework that could be used as a tool to understand how the

decision-making influence TQM implementation. To provide a better understanding an in-depth interviews been used in this study. This framework explained how each of the decision-making process influenced each of TQM implementation factors, with consideration of the centralisation and decentralisation in decision-making. The use of the theoretical framework and research design the research questions have been answered.

The study revealed that it is not about which approach is better to be implemented, rather than the contingency between the two approaches will be more beneficial for the hospitals, as the delay in identify the problem like what happened in the centralised case, or the delay in taking action in decentralised case, could affect the patient life. Thus, each hospital need the two approaches depends on the case they face it. The next section will describe the details of the practical contributions.

7.2.2 Practical Contributions

This section discusses the practical contributions this research study has added to the decision-making process and TQM implementation in healthcare context.

Our findings, which have revealed several important issues related to the decision-making process and the implementation of TQM, are presented in chapter 5. Some of the decision-making steps have not influenced the CSFs of TQM implementation; this is emerged from the data collected in this study:

- Two steps of the decision-making process have been excluded; identification and choice of the alternatives. As the two cases did not identify any alternatives for decision, they want to make, and because there were no alternatives considered, so there were no choice to be made.
- The absence of staff involvement in identify the decision to be made and monitor & evaluate the decision in centralised decision-making (centralised case), as these steps belonged to the GD authority. The absence of gathering information and monitoring & evaluating on the training programmes in centralised system, as the gather information was Training and development department responsibility and staff could not be part of this process, while monitor and evaluate, this step was refers back to the GD.
- The lack of training programmes for staff in centralised system regarding how to implement TQM, which resulted as consequences of the absence of knowledge, related to the necessity of training programmes for the implementation.

- The lack of employee empowerment in identify the decision to be made and in monitoring and evaluating the hospital progress in the centralised system.
- Lack of staff awareness about the TQM implementation benefits and continual improvement methods in the centralised system. As organisation in centralised structure, keep decision-making firmly at the top of the hierarchy, among most of the senior management.

These findings, help as a guideline for decision makers (including, policy makers, TQM implementation professionals, Hospital board of directors, middle-level managers) to maintain and improve the TQM implementation. Accordingly, there are some factors need to be consider:

The policy makers in the healthcare sector can benefits from this study to understand the barriers and the weakness point in the implementation process, especially in the public sector, as the high level of the centralised decision-making lead the TQM implementation to be failed.

Implementing TQM need more authority and lack of this authority lead to lose the staff commitment and momentum, and that's what happened in the centralised sector; however, if there is any commitment staff have it, that because they afraid to lose them position. Therefore, the policy makers and hospital management need to consider this to achieve best outcomes.

Almost no attention has been given to the cost of the centralisation in decision-making, especially in the context of TQM implementation. However, the policy makers need to give this point more attention, not only concentrate on the quality or the time of making decision.

Communication factor is a very important factor for the successful of the TQM implementation; however, especially in the public sector, this factor has not been used effectively, as the GD have a very good communication channels with the hospitals, but at the same time, that not authorised them to make decisions. Thus, people who are in charge of making decision needs to use these channels beneficially and give more authority to the hospitals management to make decisions.

Professionals can drive a better understanding of the CSFs of TQM implementation, which can assist the practitioners in charge of the decision-making to have better anticipate the future challenges of the TQM implementation. Understanding the influence

of the decision-making on the TQM implementation can help practitioners to develop effective approach to changing current practises that inhibit the TQM implementation especially in the public sector.

Hospital management and especially the TQM implementation team need to consider staff involvement as one of the main factors for successful implementation. For example; asking for staff opinions and implement these opinions, can increase the feeling that staff are part of the implantation process.

Hospitals in the public sector needs to provide effective and practical training to the staff regarding the TQM implementation in one hand, and in the other hand, staff need to give more attention for this training programmes. Focus only on the top management is one of the main reasons for the TQM implementation failure.

Both sectors need to consider identification and choose alternatives, as these two steps leads to reduce wasted time and get best outcomes, which what the TQM is looking for.

Middle-level managers supposed to be more effective, especially in centralised case, as they need be aware about the TQM implementation benefits and continual improvement. The hospital management need to authorise this level more.

The Iraqi healthcare sector needs to follow examples of successful organisations worldwide and embrace Quality Management, but at the same time need to strength their performance by improving organisational performance and providing quality. It is time to adopt suitable approach for this improvement.

7.3 Recommendations for further related research

Further studies are required to extend this research and help to improve the TQM implementation in Iraq. Therefore, a number of recommendations are made for future research. They are:

- Researchers can adopt the proposed framework and empirically validate it in different industries like the educational context.
- The researcher recommend further research to explore other TQM implementation factors, which could influence by the decision-making process, such as; job satisfaction, employee relation, etc.

- More detailed to explore especially in the centralised approach, such as doing comparison between two different centralised industries to find out how the centralisation in decision-making influence the TQM implementation.
- More detailed to explore especially in the centralised approach, when the CSFs did not influence by the decision-making steps, such as staff not involved in identify the decision to be made, or in monitoring and evaluating the implementation progress.
- Researchers can study the interaction of TQM implementation and decision-making, by use one of the decision-making theories, such as; use prospect theory to study how making decision under risk could influence TQM implementation.
- The researcher recommended further research in the centralised case, as the hospital had a high level of communication with the GD, but that did not empower the staff to make decisions, it will be interesting to go through this in depth.

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Appendices

Appendix 1: The Case Study Data Protection Protocol

The researcher considers the following requirements for data protection protocol:

1. Permission from the case study hospitals:

Formal permission will be obtained from the case study hospitals for the purposes of their participation and contribution to the case study research based on interviews and any related documentary evidence.

2. Consent Form: Written and informed consent of the research for the interviewees will be obtained on an individual basis before conducting the interviews.

3. Information Recording: the information obtained during the interviews will be recorded either via sound recorder after have permission from the interviewees, or through taken notes on paper during the interview. To maximise its validity and legitimacy, the information which is obtained during the interview whether through voice recorder or written notes will be early typed and sent to each and every interviewee for his review and approval.

4. Storage and confidentiality of the information: the information, which is obtained through the interviews, will be stored on CD, external hard drive, and hard plastic file placed in the case of written notes on the paper sheets. In the same way, all documentary evidence obtained from the case study hospitals in support of the interviews will be stored appropriately. In addition, to maximise the security of the electronic data will be encrypted and password protected. All the electronic and written information will be kept in the researcher's sole custody in a safe place in a cabinet with no access to anybody just for the researcher.

5. Protection of identity and anonymity of data: the identity of all hospitals and individuals who is sharing in this study will be fully protected by the researcher. The researcher will code everything, no need to use the real name.

6. Participation: if at any time through the research period, the participant changed his mind to be no longer as a participant, he can tell the researcher and any data related to him will destroyed.

Appendix 2: Interview Questions (First interview)

Factors	Interview questions	Related Literature Review
1. <u>Decision-making</u> 1.1 Identify the decision to be made 1.2 Gather information 1.3 Identify the alternatives 1.4 Choose from the alternatives	<ol style="list-style-type: none"> When was the decision made to use TQM? Who made this decision? What happened? Why was that? <ol style="list-style-type: none"> Who is responsible for gathering information for making decisions related to TQM implementation? How does that work? What are the hospital's methods for gathering information? What do you think about these methods? <ol style="list-style-type: none"> How were the alternatives for TQM implementation identified? Was any alternative for TQM implementation considered? If yes. What? If no. Why not? Who was responsible for identifying the alternatives? <ol style="list-style-type: none"> Who was responsible for choosing between the alternatives? Which one has been selected? Has the hospital management considered employees' opinions in choosing between the alternatives? If yes. How? If no. Why not? What is the hospital's process for choosing between the alternative decisions? 	<p>(Ah-Teck and Starr, 2014, Akdere, 2011, Alexander, 2015, Bossert, 1998, Bossert and Mitchell, 2011, Bouraoui and Lizarralde, 2013, Chang and Chu, 2003, Chen et al., 2013, Cohen et al., 1972, de Klerk, 1994b, Gregory et al., 2012, Hajjar et al., 2012, Kobayashi et al., 2015, Maitland and Sammartino, 2015, Marsh, 1992, Park et al., 2013, Siddiqi et al., 2009, Zheng and Negenborn, 2014, Zoghi and Mohr, 2011).</p>

<p>1.5 Take action</p>	<ol style="list-style-type: none"> 1. Was the TQM implementation decision supported by the senior management? How? 2. What decisions have senior management made regarding TQM implementation? When were these decision taken? 3. Does the hospital management have the authority to take any actions related to implementing TQM? How? 4. How does the hospital prepare to take any action related to TQM implementation? 	
<p>1.6 Monitor and Evaluate</p>	<ol style="list-style-type: none"> 1. Who is responsible for evaluating and monitoring TQM implementation? How? Why? 2. How does the hospital deal with any delays in making decisions? Why? Can you give an example of that? 	
<p>2. <u>TQM Implementation</u></p>		
<p>2.1 Senior Management Commitment</p>	<ol style="list-style-type: none"> 1. Has the senior management made a plan to implement TQM? If yes, how? If no. Why not? 2. Which actions were taken to ensure that there is a commitment from the senior management? When were these actions taken? Who did this? 3. What barriers impeded TQM implementation? 4. How did the senior management avoid or negate these barriers? 	<p>(Abdallah, 2014, Abusa and Gibson, 2013b, Ahmad and Elhuni, 2014, Aly and Mark, 1993, Arumugam et al., 2009b, Bennett and Kerr, 1996, Brashier et al., 1996, Bugdol, 2005, CHAN et al., 2000, Guimaraes, 1997, Harrington et al., 2012, Jackson, 2001, Jamali et al., 2010, Keeble-Ramsay and Armitage, 2010, Kock 1991 , Krasachol and Tannock, 1999, Lindberg and Rosenqvist, 2005, Mellahi and Eyuboglu, 2001, Mensah et al., 2012, Moosa et al., 2010, Mosadeghrad, 2013, Mosadeghrad, 2014b,</p>

<p>2.4 Employee Empowerment</p>	<ol style="list-style-type: none"> 1. Who is responsible for deciding which training programme you have to enrol with and why? 2. Have you made/participated in a plan for the training programme? If yes. How? If no. Why not? 3. Was there a special training programme planned and implemented to support TQM implementation? Why? When? By whom? To whom? 4. Was any external consultant used? If yes. Why? If no. Why not? 5. Do you think you have appropriate training to make decisions? If yes. How? If no. Why not? 6. Have the managers had previous training of TQM implementation? If yes, what training have they received? When? If no, why not? 7. Does the hospital management have a special policy to manage unsatisfactory training results? How? 8. Have the managers had previous experience of TQM implementation? Yes/No. If no, why not? <ol style="list-style-type: none"> 1. Who is responsible for empowering the employees to make a decision? 2. Does the senior management support the employees' decisions regarding TQM implementation? If yes. How? If no. Why not? 3. Have the staff been empowered to make decisions regarding TQM implementation? Yes/No. If yes how? If not. Why? 4. Do the employees accept the empowerment? How? 	
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Appendix 3: Interview Questions (Second interview)

Factors	Interview questions	Related Literature Review
<u>Decision-making</u> 1. Take action	<ol style="list-style-type: none"> 1. Was the TQM implementation decision supported by the senior management? How? 2. What decisions have senior management made regarding TQM implementation? 3. When were these decision taken? 4. Does the hospital management have the authority to take any actions related to implementing TQM? How? 5. How does the hospital prepare to take any action related to TQM implementation? 	<p>(Ah-Teck and Starr, 2014, Akdere, 2011, Alexander, 2015, Bossert, 1998, Bossert and Mitchell, 2011, Bouraoui and Lizarralde, 2013, Chang and Chu, 2003, Chen et al., 2013, Cohen et al., 1972, de Klerk, 1994b, Gregory et al., 2012, Hajjar et al., 2012, Kobayashi et al., 2015, Maitland and Sammartino, 2015, Marsh, 1992, Park et al., 2013, Siddiqi et al., 2009, Zheng and Negenborn, 2014, Zoghi and Mohr, 2011).</p>
2. Monitor and Evaluate	<ol style="list-style-type: none"> 1. Who is responsible for evaluating and monitoring TQM implementation? How? Why? 2. How does the hospital deal with any delays in making decisions? Why? Can you give an example of that? 	
<u>TQM Implementation</u> 1. Senior Management Commitment	<ol style="list-style-type: none"> 1. Has the senior management made a plan to implement TQM? If yes, how? If no. Why not? 2. Which actions were taken to ensure that there is a commitment from the senior management? 3. When were these actions taken? 4. Who did this? 5. What barriers impeded TQM implementation? 6. How did the senior management avoid or negate these barriers? 7. Has the senior management communicated with the employees to minimize these barriers? If yes. How? If no. Why not? 	<p>(Abdallah, 2014, Abusa and Gibson, 2013b, Ahmad and Elhuni, 2014, Aly and Mark, 1993, Arumugam et al., 2009b, Bennett and Kerr, 1996, Brashier et al., 1996, Bugdol, 2005, CHAN et al., 2000, Guimaraes, 1997, Harrington et al., 2012, Jackson, 2001, Jamali et al., 2010, Keeble-Ramsay and Armitage, 2010, Kock 1991, Krasachol and Tannock, 1999, Lindberg and Rosenqvist, 2005, Mellahi and Eyuboglu, 2001, Mensah et al., 2012, Moosa et al., 2010, Mosadeghrad, 2013, Mosadeghrad, 2014b, Nwabueze, 2011, Nwakanma et al., 2014, Sharma and Kodali, 2008, Short and Rahim, 1995, Talib et</p>

<p>4. Employee Empowerment</p>	<ol style="list-style-type: none"> 2. Have you made/participated in a plan for the training programme? 3. If yes. How? If no. Why not? 4. Was there a special training programme planned and implemented to support TQM implementation? 5. Why? 6. When? 7. By whom? To whom? 8. Was any external consultant used? If yes. Why? If no. Why not? 9. Do you think you have appropriate training to make decisions? 10.If yes. How? If no. Why not? 11.Have the managers had previous training of TQM implementation? 12.If yes, what training have they received? 13.When? 14.If no, why not? 15.Does the hospital management have a special policy to manage unsatisfactory training results? How? 16.Have the managers had previous experience of TQM implementation? Yes/No. If no, why not? <ol style="list-style-type: none"> 1. Who is responsible for empowering the employees to make a decision? 2. Does the senior management support the employees' decisions regarding TQM implementation? If yes. How? If no. Why not? 3. Have the staff been empowered to make decisions regarding TQM implementation? Yes/No. If yes how? If not. Why? 4. Do the employees accept the empowerment? How? Why? 	
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<p>5. Continual Improvement</p>	<ol style="list-style-type: none"> 1. Who was responsible for choosing which methods would be implemented? Why was this method chosen? What do you think about it? 2. Have you had training about this method? Yes/No. Why? 3. Has anyone explained to the staff about the method type and what the point of it is? Yes/ No. why? 4. Has anyone asked you about your opinion for the method they want to implement? By survey, questionnaire or anything else? 	
<p>6. Communication</p>	<ol style="list-style-type: none"> 1. Was there a communication plan for TQM implementation? Why? When? By whom? 2. Was this plan implemented? 	

Appendix 4: Summary of First interviews of Case Study (A)

Interview questions	Element of the theoretical framework	Interview responses A1	Interview responses A2	Interview responses A3	Interview responses A4	Interview responses A5	Interview responses A6	Documentary Evidence	Pattern Summary
Decision-making									
1.1. Identify the decision to be made.	1. When was the decision made to use TQM?	2013	2013	2013	2013	2013	2013	A formal letter from Iraqi Health Ministry to all Iraqis hospitals on 14 th November 2013.	The decision to implement TQM was first considered in November 2013 But, didn't be activating till early 2014.
	2. Who made this decision?	The Iraqi health ministry made it.	Of course by the Iraqi health ministry.	The Iraqi health ministry	The Iraqi health ministry	Like this a big decision always come from the GD (Iraqi Health Ministry).	The GD.		The governmental department made the decision.
	3. What happened?	The hospital starts to plan how to implement TQM within the limitation of the hospital knowledge regarding this issue.	The hospital started by planning how to implement TQM and who staff will involve with this implementation.	Quality committee was formed and they begin plan for the TQM implementation. But the problem was how the hospital plan for something already has a	The hospital management put a plan for how to implement TQM and formed a quality committee.	The interviewee was not sure because it was before his involvement, but he mentioned to form the quality committee.	The hospital put implementation plan insight of the GD decision.		The hospital starts to plan how to implement TQM within the lack of the hospital knowledge about it and choose who is going to be

				few information about it or almost nothing.					involved in this implementation. While, interviewee A5 was not sure about the first step because it was before his involvement.
	4. Why was that?	Because the health ministry asked them to do that.	Because it is something new to us and the hospital should prepare for it, also, the GD will ask what the hospital did about it.	To improve the hospital services performance and increase the staff efficiency.	The hospital management tried to put the situation under control.	The interviewee was not sure, but he supposed that because the GD asks to do it.	Because the GD asked them to do that.		Interviewee A2, A3 and A4 response that because the hospital wants to put the situation under control and because the TQM is new for the hospital staff. While, interviewee A1, A5 and A6 responses that the GD asked the hospital that.
1.2. Gather information	1. Who is responsible for gathering information for making decisions related	It's the hospital manager and the quality committee responsibility.	The quality committee	The hospital manager and quality committee	The quality committee	The quality committee and the department's manager.	The quality committee.		The hospital manager and quality committee who are responsible for gathering the

	to TQM implementation ?								required information, interviewee A5 added that the departments' manager also be art of this.
	2. How does that work?	Most of the time by a board meetings.	Quality committee is divided into 3-4 teams go around the hospital departments to gather the required information.	The quality committee did that by survey, in addition, there is a mobile team who are responsible for asking the staff regard the required information, and this team have knowledge regard issues they face it.	The quality committee have a member of staff who is responsible about gather the required information form that particular departments.	Quality committee contains one-member staff from each department and this person who is responsible for gathering the required information.	The quality committee have around three mobile teams, collect information from the hospital departments.		The quality committee asked the hospital staff regarding any issue they need to collect information regard it, by a mobile team, which includes one person from each department. Interviewee A1 uttered, by a board meeting.
	3. What are the hospital's methods for gathering information?	By asking staff face to face and check it in reality.	By survey and asking the hospital staff	By survey and asking the hospital staff face to face.	Face to face meeting.	Face to face and sometimes survey.	Face to face meeting with the people who have knowledge about the case.		Face to face and through survey were the hospital methods to gather the required information.

	4. What do you think about these methods?	Effective	It is effective in 60 %	I think it is not bad for the current time, but the hospital need to develop it in the future.	I think it is effective because you can check by self about the information in reality.	It is effective but not in high percentage.	Not bad for the current time.		It is effective for the present time, but for the near future its need to develop.
1.3. Identify the alternatives	1. How were the alternatives for TQM implementation identified?	Not applicable	Not applicable	Not applicable	Not applicable	I do not know.	Not applicable		Not applicable
	2. Was any alternative for TQM implementation considered? If yes. What? If no. Why not?	No. because it is out of our authority.	Not applicable	Not applicable	Not applicable	I do not know	Not applicable		Not applicable
	3. Who was responsible for identifying the alternatives?	The governmental department (GD) if it's available	If it is available, the GD of course.	There were no alternatives	I think the GD.	The GD	There were no alternatives		The GD, who is responsible for identifying the alternatives if it's available, but it seems there were no alternatives been considered
	1. Who was responsible for choosing	The GD.	GD	GD	The GD	The GD	The GD		The GD, who is responsible, to

1.4. Choose from the alternatives	between the alternatives?								choose between the alternatives.
	2. Which one was chosen?	Didn't know until the decision is already been made by the GD.	Basically, we did not know if there were alternatives considered or not.	This option is already out of our authority, so, the hospital did not know much about that.	It is already come to the hospital from the GD, so we have no idea which one and why.	I do not know. However, as I think the GD who are doing this.	It's already come from the GD.		The GD is responsible for choosing which alternative the hospital should follow.
	3. Has the hospital management considered employees' opinions in choosing between the alternatives? If yes. How? If no. Why not?	For the decisions related to TQM implementation, it is the GD responsibility. While, for the normal things the hospital management responsible about that.	With issue related to our authority, I can say yes. By meeting and asking the authorised staff from the particular department about them opinion.	The hospital not consider alternatives or plan B for any decision.	The hospital just fellow what the GD asked to fellow, so staff opinions not in consideration.	Within the hospital authority yes, otherwise, the GD responsible about TQM implementation decisions	Staff not interesting to set an alternative, as the glory of this will go to the direct manager.	Board meeting notes 22 nd August 2014, as they mentioned for a matter and who suggest the solution for it, and that's was from the emergency department.	The hospital management have no right to choose which alternative should follow, but in normal situation, the managers asked for the staff opinion.
	4. What is the hospital's process for choosing between the alternative decisions?	Board meeting to decide which alternative should choose.	Meeting, either board meeting or personal meeting with the staff who have knowledge about that.	Board meeting	By Board meeting	Board meeting	Board meeting		The board meeting is the hospital method to choose between the alternatives, if it is available. Interviewee A2 added personal meeting sometimes

									could be happened.
1.5. Take Action	1. Was the TQM implementation supported by the senior management? How?	Yes, it was fully supported by them. That is by putting a plan to implement it.	Yes, I think they support it at least at the beginning, by put plan to implement TQM.	Yes, they try hardly to plan how to implement it and did some meetings with Basra health directorate about that.	Yes, by setting clear objectives for implement TQM and planning how to reach this goals.	I am not sure about that at the begging but I think yes they support it.	Yes, by planning how to implement TQM and sharing this plan with the board members.		It was supported by them as they plan how to implement TQM and to try to set a clear objectives to do that.
	2. What decisions have senior management made regarding TQM implementation ? When were these decisions taken?	Self-assessment, reduce the defects in the managerial processes and improve the quality of the medical stuff. That happens when the hospital planned how to implement TQM (in early 2014).	Self-assessment that was the first step came straight away regarding TQM implementation, within the first 4-5 months.	Self-assessment was the first thing the hospital started with, to know where the hospital standing. That has happened within the first 3 months.	As I remember, the first step was self-assessment to the hospital's departments. That was within the first 3 months.	Self-assessment was the first thing they did it. That has happened within the first six months if I am not wrong.	Of course, self-assessment was the first thing to know where is the hospital standing and what progress will achieve in the future. That has happened within the first 4-5 months.	Board meeting notes 23 rd June 2014.	Self-assessment was the first step in the implementation process. This decision occurred within the first six months. Interview A1 added, reduce the defect in the managerial process and improve the quality of the medical stuff was within the first few things to do it.

	3. Does the hospital management have the authority to take any actions related to implementing TQM? How?	Yes, but within the authority which gives to us by the GD	Not in wide extent. The hospital management authority it is very limited.	No. It is a very limited authority. Because we have to ask the GD "I can say" about everything.	The real decision is for the GD, but the action to implement it is to the hospital management authority, but sometimes the GD gives the hospital no right even for this.	They have authority just to plan the way to implement TQM under the GD control.	Not in wide extent, they just apply what the GD decided for them.		The hospital management have very limited authority. They just implement what the GD decided for them.
	4. How does the hospital prepare to take any action related to TQM implementation ?	Check the hospital's ability to do what the GD asked them to do. Trying to motivate staff to be involved in quality implementation activities.	Check the hospital ability if they can implement what the GD asked them to apply it or if they need some help from them or from external consultant.	Board Meeting to discuss the GD decision and find out how to implement it.	Meeting with staff who are involved in TQM implementation in addition, with the individuals that have knowledge about it to ask them about what is the best way to implement x issue.	Board meeting to see how they are going to implement the GD decision.	Board meeting to discuss and check the hospital ability to implement what the GD asked them to do.		Board meeting to discuss the GD decision and to find out a way to implement it.
1.6. Monitor and Evaluate	1. Who is responsible for evaluating and monitoring TQM	The GD is responsible about that. In the beginning, the hospital management do	The GD, also, the hospital management which they did a primary assess and the GD	The hospital manager and the departments managers as well, whom they did a primary	The GD responsible about that but of course in the sight of the	The GD but the hospital should do that before, and the GD will check this in depth.	The hospital manager with departments' managers were responsible to do the		The GD were responsible about that, but the hospital did as a primary evaluate and

	implementation ? How? Why?	as primary evaluate and then the GD checks this later on with the details.	check this later on.	evaluate to send it later to the GD.	hospital evaluates.		evaluation reports and then send these reports to the GD to monitor and evaluate everything.		sent it to the GD who going to check it in details.
	2. How does the hospital deal with any delays in making decisions? Why? Can you give an example of that?	Because the decision is out of the hospital authority so I cannot do anything just remind the GD about it and inform them about the situation. e.g. I have authority to pay just for the medical treatments, patients' food, etc.	I can do nothing just check the situation with the GD because the decision is out of my authority. The interviewee could not remember any example.	Checks the case details and then contact the GD again and ask them about it tell to get a response from them. However, if it is related to Basra health directorate authority then ask for an urgent meeting with them to solve the problem.	In case if the delay inside the hospital then the hospital manager will keep this under eye until fix the problem. While, if the delay because it is out of the hospital authority (GD authority) then the procedure will be by contact the GD to ask about this delay.	Most of the time the delay was because the decision is out of the hospital authority for that should wait for the decision from the GD. I remember when the hospital manager wants to let me enrol in the implementation process and take my responsibility as a department manager, the GD approval	If the case is out of the hospital authority, then there is nothing to do it just wait for the GD response and it is always because the GD centralisation.		Most of the time they did not do anything just waits the GD response. In the case of the decision within the hospital authority then, they will try to do an urgent meeting with the one how is responsible for this delay and try to solve the problem.

						for this issue took around two months.			
TQM Implementation									
2.1. Senior Management Commitment (SMC)	1. Has the senior management made a plan to implement TQM? If yes, how? If no, why not?	Yes. Regarding the GD objectives from TQM implementation the SM planning how to implement TQM, by choosing the individual who will involve, what training the hospital should do to the staff and the communication way.	Yes, by selecting the people who are going to involve in TQM implementation, how to implement it and of course that was insight of the GD requirements.	Yes, by choosing the staff that is going to involve with in this process, and let them enrol in training about how to implement TQM. Also, set the main steps for this implementation.	Yes, by set the main and clear objectives and choose the right people to implement it (Quality Committee).	Yes, they did, and that was before my enrolment in the implementation process.	Yes, be set clear objectives to the TQM implementation, what the benefits from it, and choose the people who are going to involve in these.		The hospital put a plan to implement TQM insight of the GD objectives. In addition, the hospital management chooses the quality committee members and who are going to involve in the TQM implementation.
	2. Which actions were taken to ensure that there is a commitment from the senior management? When were these actions taken?	A discussion at the board meeting occurred. In addition, presentation for TQM implementation benefits for the staff.	Board meeting to discuss the benefits from the TQM implementation, also, a presentation by the external consultant was made.	At the beginning, we did board meeting to discuss the benefits from the TQM implementation, and Basra health directorate	Basra health directorate did a presentation for the hospital board members; in addition, discuss the implementation benefits through the board	As I knew, there is a presentation for TQM implementation benefits happened at the beginning and that was sponsored by	Within the first three months, Basra health directorate did a presentation to explain what the benefits form TQM. In addition, there Is a board	Hospital board meeting on 25 th March 2014, which is contained, uses an external consultant from Basra health directorate who did a	Basra health directorate did a presentation to the hospital management staff (Board members) to explain the implementation benefits for the

	Who did this?	This action is taken at the first implementation steps, around first 2-3 months. External consultant made the presentation.	That happens within the first 3 months.	presented a presentation about that. I believe that happen within the first 3-4 months.	meeting. That has happened within the first 4 months. Then the regular board meeting.	Basra health directorate. I think that was within the first 3 months.	meeting happened to discuss this further.	presentation to the board members about the TQM implementation benefits, then, by regular board meetings, which were happened monthly.	hospital services that have happened within the first 4 months. In addition, the hospital management did board meeting to discuss the implementation benefits and how the hospital is going to implement it.
	3. What barriers impeded TQM implementation ?	Do not have enough authority (financial and managerial authority)	Of course the hospital authority limitations.	I think the biggest problem is with the hospital management authority because the hospital should back to the GD to ask them almost about everything.	I think the financial authority is the first obstacle.	There is almost no authority to the hospital management.	The high level of the GD centralisation.		The main barrier to implementing TQM is the limitation in the hospital authority and that because the GD centralisation.
	4. How did the senior management avoid or negate these barriers?	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable

	5. Has the senior management communicated with the employees to minimise these barriers? If yes. How? If no. Why not?	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable
	6. Has the senior management the authority to evaluate employees' performance? If yes. How? If no. Why not?	It is not fully evaluated; it is just like an essential evaluation. The full authority is for the GD.	"As I mentioned before, it is just a primary evaluate".	Just a primary evaluate, but the real one is related to the GD authority.	Yes, we have the authority to do this, but the GD will check our evaluate as well.	Yes, the hospital doing employees evaluate and send it to the GD to check it.	The hospital did the primary one and sent it to the GD, which is going to do the main one.		The hospital has just a primary evaluate that is send it to the GD, which is going to do it in details.
	7. Has the Governmental dept. granted the local hospital managers responsibility and authority? If yes. How? If no. Why not?	In some instances, yes. Just to decide how to implement the decision which is already taken by the GD.	Not that much, just to choose how to implement the GD decision.	It is not really authority because the hospital management does not have many things to do it freely.	It is a restriction authority.	It is almost no authority.	The hospital already has a limitation authority, so there is no support from the GD. We implement what they ask as to do, and that is it.		The hospital management has the right just to implement the decision which is already taken by the GD.
	8. Does the hospital have the appropriate	No, because there is no enough training	Not really, because the hospital did not	I think it depends on the person himself	Quality committee did training about it.	I do not think so because there is no	I do not think it is enough because we did		Just the quality committee have training about

	knowledge to implement TQM? How?	about that. The quality committee give the procedures headlines for the staff.	have the appropriate training.	because there is no enough training about this.	Otherwise, the rest of the hospital staff did not have appropriate knowledge about it.	much training for that, just a basic one by the quality committee.	not use any external consultant or someone who is really expert with TQM.		TQM, while the rest of hospital staff have a basic one that is gave for them by the quality committee.
	9. Have you ever refused to implement any decision before? Yes/No. Why?	No. because I do not have authority to refuse the decision which is organised by the GD.	I have no authority to reject any decision.	I believe that nobody has the right to refuse the GD decision, but you can discuss with them about it after you implement the decision of course.	No, because I already knew I have to apply it whatever was.	No, because there is no flexibility with that from the GD.	Yes, and that's was because there is something wrong in the GD process in specific issue, which is cause me later six months delay in my bonus as a punishment.		It seems that nobody even thinks to refuse any decision because they believe that they have to implement any decision. Except the interviewee A6 who is refuse one before and got a punishment at the end.
	10. Were there clear objectives set for implementing TQM? Yes/No. Why?	Yes. To make it easier to the hospital to implement it, and because it is new for the hospitals and they have no idea how to work with that.	"I will be positive and say yes" because it is supposed to facilitate the implementation steps.	Not that much. The interviewee refused to explain more.	The hospital tried hard to put clear objectives, but I think it is not enough that much because until now there are many individuals they did not know what is them a	In light of the limitation of the hospital knowledge, yes it is clear.	In my opinion, the hospital management is trying hard to facilitate everything to the hospital staff as the case as within the hospital authority.		The hospital tried to put clear objectives as much as they have knowledge about that.

					role in the implementation process.				
	11. How is the progress of TQM implementation monitored? By whom?	By the hospital board meeting which is sent later on to the GD.	By the board meeting and the GD.	Regular meeting.	Regular meeting. By quality committee and GD.	Quality committee and regular meeting.	The hospital board meeting and quality committee as well. The quality committee monitor that within the GD control.		Quality committee and board meeting monitor TQM implementation progress and that's all happen under GD control.
2.2. Staff Involvement (SI)	1. Who was responsible for deciding how many people would be involved?	The hospital manager	The hospital manager	The hospital manager	The hospital manager	Hospital manager.	Hospital manager and board members.		The hospital manager is responsible about that.
	2. Who chose the people to be involved?	The hospital manager and the Quality Committee as well.	The hospital manager and quality committee.	The hospital manager and the rest of the departments' managers.	The hospital manager after asking the departments managers.	Hospital manager and quality committee.	Hospital manager and board members.	Board meeting on 27 th February 2014 that is discuss who are going to involve in this.	It is sharing responsibility between the hospital manager and quality committee as well.
	3. Have you had any experience of working in a group in the TQM	Yes. It was helpful and effective. However, sometimes it is	Yes, and it was helpful. It is effective if the people keep	Yes, and it was good and help me to have a rich knowledge	Yes, and it was helpful. I think there is no difficulty	Yes sure, and that helps me a lot because I was not with the TQM	Yes, and it was effective. I cannot remember any		The interviewees had experience with working within a group

	implementation process? How did that go? What do you think about it? Do you think it works? Is there any difficulty with it?	hard to find the appropriate teamwork.	the commitment in their responsibility.	from my colleagues. I think if the team have a good understandable to each other then it is will be no problem at all.	with it because the team was great.	implementation process from the beginning. I do not think there is any difficulty with it at all.	difficulties about that right know.		and that has happened when the hospital starts implement TQM, which was helpful for them because they all new in this issue.
	4. Was the use of teamwork considered? If yes. How and why? If no. Why not?	Yes, because the hospital management believes of teamwork effectiveness and most of the time, they used to work as a team.	Yes, sure. Because it is the best way to reach the goals.	Yes, and from the first step, the hospital management considered that and formed the quality committee as a team to work together.	Yes, sure, because it is one of TQM factors. In addition, the hospital already examines this before and has full conviction about it.	Yes, as I mentioned before. Not just within the TQM implementation, but also with the other cases.	Yes because the hospital management has a full conviction about that. For example, quality committee (who they worked as team)		The use of team work was considered even before TQM implementation.
2.3. Training	1. Who is responsible for deciding which training programme you have to enrol with and why?	Training and development department. That is because it is them jobs.	The training development department. Because they are who is responsible for.	The hospital has a special department who is responsible about this which is the training development department.	The department's manager could suggest which programme they the staff need to enrol with, but the decision is not related to them. The real decision is for	Training development department.	Training development department and that is because it's the department responsibility.		There is a special department who is responsible for choosing and to plan to the staff-training programme, who is called training development department.

					the training department.				
	<p>2. Have you made/ participated in a plan for the training programme?</p> <p>If yes. How? If no. Why not?</p>	Make a Plan no, but training the staff yes.	No, because it is not my responsibility to do that.	I suggest some training programmes before, and that is my responsibility as a manager.	Just suggest it but not planning for it.	No, I have not done any of these before, because it is back to the training department responsibility.	I did suggest a training topic before, but I have no authority to do anything more than that.		Some interviewees only suggest some training programmes. Otherwise, the rest of training details it belongs to the specific department.
	<p>3. Was there a special training programme planned and implemented to support TQM implementation ? Why? When? By whom? To whom?</p>	Yes, that happens at Basra health directorate. To let the staff know how they have to implement TQM. In addition, the quality committee did a simple training for small groups of the staff.	Yes, at the beginning of TQM implementation within the first 3 months, at Basra health directorate. That was to let the staff understand what will do regarding TQM implementation.	Yes, that has happened at the beginning in Basra health directorate within the first 4 months, and it was for the quality committee and the board members.	<p>Just at the beginning by the health directorate.</p> <p>That was within the first 4 months as I remember.</p>	As I mentioned before, that's was just at the beginning by Basra health directorate, and then the quality committee did some training to for the staff.	The quality committee did a basic training for a few numbers of the hospital staff, but there is no external trainer was used just at the beginning by Basra health directorate.		There is just an external consultant was used who made a presentation at the beginning of TQM implementation for the board members and the quality committee within the first 4 months. Then the quality committee did some training for the hospital staff.

	4. Was any external consultant used? If yes. Why? If no. Why not?	No, because the GD not allowed as to do that. If there is any external consultant we need it, and then should contact the GD, and they will decide about it.	The outside consultant was used at the beginning of TQM implementation and just for the board members. Because it needs a list of complicated procedures to use this option.	The only external consultant was used just at the beginning in the health directorate, which was just for the quality committee and the board members. Because the complicated of getting approval to use the external trainers.	No, because first there are no fund for this training. Second, it is not easy to get approved from the GD regarding this.	The hospital not allowed using external consultant without the GD approval, which is not easy to get it.	There is no external consultant used just at the beginning because it is out of the hospital authority.		The only external consultant used was from Basra health directorate, and that's was at the beginning of TQM implementation because there is a complicated procedures should follow it to get approval from the GD regarding that.
	5. Do you think you have appropriate training to make decisions? If yes. How? If no. Why not?	To be honest, I can say no. Because there is no specific training about that, and also even if I do this the situation in Iraq is so difficult to make any decisions.	Not really, because I just used my own experience in this field. I think there is no specific training about that.	I do not have training about that just my experience within this area as a manager.	I do not think so because there is no training at all for this.	I use my own experience regarding that, but there is no specific training about that.	Nobody have training like that.		There is a little knowledge about decision-making because there is no specific training regarding this issue.
	6. Have the managers had the previous	No, just a few things they knew it from the	No.	Not really, just a basic thing from the first	As I know, no, they did not have training	No, I am not sure maybe because	No, they do not. Because it is all new issue to		Most of the hospital managers they

	training of TQM implementation ? If yes, what training have they received? When? If no, why not?	quality committee. Because there is no extra fund for the training programmes.	The interviewee did not know why.	presentation and few more things from the quality committee.	about TQM just the health directorate presentation and a few details from the quality committee.	nobody asked them to do that.	work with and there is almost no fund for that.		did not have any training regarding TQM implementation just the one which is occurred at the beginning of TQM implementation by Basra health directorate.
	7. Does the hospital management have a special policy to manage unsatisfactory training results? How?	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable
	8. Have the managers had previous experience of TQM implementation ? Yes/No. If no, why not?	No. the interviewee did not know why.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable
	1. Who is responsible for empowering the	The hospital manager who is already has	The hospital manager.	The hospital manager	The hospital manager	The hospital manager	The hospital manager		The hospital manager

2.4. Employee Empowerment (EE)	employees to make a decision?	limited authority.							
	2. Does the senior management support the employees' decisions regarding TQM implementation ? If yes. How? If no. Why not?	Yes, especially with the staff who have authority to participant in decision-making like department's managers and quality committee. By direct contact with the expert staff.	Yes, but just with staff that already have authority to share in decision-making. By asking them through regular meetings or direct contact with the one who have knowledge regarding case x.	Yes, but that is with the staff who have right to share in decision-making. Otherwise, I think it is hard for the others.	Within the hospital authority yes, they did. By discussing the decision with them and consider the employee suggestion regard that.	I believe that available with quality committee but with rest of the hospital staff; I do not think so.	Yes, even within the hospital authority limitation but still the employees opinion considerable by the SM as they are more expert with them environment.		There is already limitation in the hospital authority, but still, there is a support to employees' opinion, as they are more expert with the case they are working with. That happens by direct contact with them or through the regular meeting.
	3. Have the staff been empowered to make decisions regarding TQM implementation ? Yes/No. If yes how? If not. Why?	Yes. Quality committee and managers department as well have the authority to make decisions insight of TQM implementation. To improve the hospital performance.	Yes, especially quality committee. That because they have to do many things and they should have authority to do it.	Yes, the quality committee have this. Because they are who are really responsible for the implementation.	The quality committee empowered about that, but other staff no.	The quality committee have this right. But of course within the hospital management authority.	Just the quality committee and its limited authority, so they cannot make big decisions.		The interviewees concentrate on how quality committee have authority to make a decision, while the rest of the hospital staff they do not have like this empowerment.

	<p>4. Do the employees accept the empowerment?</p> <p>How?</p> <p>Why?</p>	<p>Yes, if it was with GD roles. Otherwise, they refuse it. Because they are enjoying when they have authority.</p>	<p>I think yes, they accept it because people enjoy when they have authority.</p>	<p>Yes.</p> <p>They did not hesitate to take them responsibility when someone offers them that.</p> <p>Because they want to prove themselves.</p>	<p>Yes, they are happy with that.</p> <p>Because they are trying to prove themselves in front of the hospital management.</p>	<p>Not anymore, because most of the people afraid from the GD punishment as they keep looking to any defect.</p>	<p>In some cases, yes they accept it, and in other not because they are afraid if there is any defect happen then the GD will not be flexible with that at all.</p>		<p>The interviewees realised that most of the staff do not mind to be empowered. Because they want to prove themselves, while, interviewee A5 and A6 mentioned that the people did not interesting that anymore.</p>
<p>2.5. Continual Improvement (CI)</p>	<p>1. Who was responsible for choosing which methods would be implemented?</p> <p>Why was this method chosen?</p> <p>What do you think about it?</p>	<p>The hospital manager and the board meeting within the GD roles.</p> <p>They discuss that and then they choose the best from them respective of course.</p>	<p>The hospital manager and the board members as well.</p> <p>This method was chosen because they tried to be in safe when the decision came from more than one member. In a way it's effective.</p>	<p>By a discussion through the board meeting.</p> <p>I think it is effective at least from our perspective.</p>	<p>The hospital manager and board members and of course it is in light of the GD roles.</p> <p>Yes, it is effective and better than to be just by the hospital manager decision.</p>	<p>The hospital manager and the board members as well.</p> <p>Because the hospital procedures support teamwork spirit.</p>	<p>The hospital manager who discusses that with the board members.</p> <p>Of course, it is better than to belong just to the hospital manager as it was in the past.</p>	<p>Board meeting notes include discussion about that.</p> <p>22nd August 2014,</p> <p>29th May 2015</p>	<p>The hospital manager and the board members as well, who are responsible for choosing the method in light of the GD roles.</p> <p>Generally, it is effective because it's sharing more than one mind (hospital manager and</p>

									board members). Interviewee A2 mentioned to the people tried to be in safe when they share other in the decision.
	2. Have you had training in this method? Yes/No. Why?	No. There is no much funding for training.	No, because the hospital did not have training for this.	No, I think because the hospital management see this training not really necessary.	No, maybe because we think there is no need for this.	I think, just the board members had trained about that. Because there is no much fund for using an external consultant to train the hospital staff regarding that.	No. I guess that's need external consultant and it is not easy to get approval from the GD for that.		The most of the staff did not have any training about that, and that's because the hospital did not have a fund for this kind of training.
	3. Has anyone explained to the staff about the method type and what the point of it is? Yes,/ No. why?	Yes, to be more familiar with it and know what is going on and why.	Yes, to know what the reason for it, and what the hospital will gain from it.	Yes, just a few details about it, to understand what is going on around them.	Yes, just the head line for it, to understand what is going on.	Not that much, just the basic things. As I think because the staff did not like too much detail.	Just the main points not in details. I think that is because the hospital management did not have appropriate knowledge about it.		There was very brief knowledge about the method type.

	4. Has anyone asked you about your opinion on the method they want to implement? By survey, questionnaire or anything else?	Yes, most of the time is face to face within the board meeting or by the Quality Committee.	Yes, for me most of the time face to face at the board meeting.	Yes, because I am one of the hospital board members.	Yes, that was by face to face and through the survey as well.	Yes, by the board meetings (face to face).	Yes, and that has happened face to face and by the survey as well. But most of the time is face to face.		All of the interviewees confirmed that the hospital management asked them an opinion. By face to face interview and survey as well.
2.6. Communication	1. Was there a communication plan for TQM implementation ? Why? When? By whom	Yes. To evaluate the hospital progress and report that to the GD. That happens every 3 months, by the quality committee.	Yes, and it is happening every three months to evaluate the hospital progress.	Yes, and it is happening every three months to evaluate the hospital progress, and the quality committee responsible about it.	Yes, every 3 months. By the quality committee.	Yes, it's happening every three months between the hospital and Basra health directorate who is be in contact with GD.	Yes and the quality committee responsible about doing that every three months and send it to the GD.	Hospital communication plan which was set by the board meeting on 27 th of May 2013.	There is a communication plan for TQM, and it has happens every three months to evaluate the hospital progress.
	2. Was this plan implemented?	Yes	Yes	Yes	Yes	Yes	Yes		Yes
3. General Questions	1. Is there anything else that we have not discussed that you think helped TQM implementation ?	No	No	No	No	No	No		No

	2. Is there anything else that we have not discussed that you think prevented TQM implementation ?	The politics interventions and lack of the GD support.	The external influences like the political parties interventions.	No	No	Nothing	No		The interviewee mentioned to the external influences and especially the political interventions.
	3. How were these hindrances overcome?	Not applicable	Not applicable	Not applicable	No	Nothing	No		No

Appendix 5: Summary of Second Interviews of Case Study (A)

Interview questions	Element of the theoretical framework	Interview responses A7	Interview responses A8	Interview responses A9	Interview responses A10	Interview responses A11	Interview responses A12	Documentary Evidence	Pattern Summary
Decision-making									
1.5. Taking Action	1. Was the TQM implementation decision supported by the senior management? How?	Yes and they still support this. By planning and managing the implementation process.	It is not like at the beginning but they still support it. Regular meeting is the more reliable way to do this.	Yes, they still support it, by doing regular meeting with the staff to check the progress.	They do support the TQM implementation, however there is no many actions been considered just regular meetings with staff.	They support it because they have to do that, otherwise they will be demoted.	They have no option either support the decision or they will be demoted.		There are support from the SM, but no many actions been taken to show this commitment. Part of the interviewees mentioned if the SM not support the implementation process they would be demoted.
	2. What decisions have senior management made regarding TQM implementation ?	Set up plan for the implementation, doing self-assessment and holding regular meetings to check the hospital progress.	Through board meetings there were many decisions been taken, like doing regular meetings to check the hospital progress.	Self-assessment was the first decision and then doing regular meetings to monitor the implementation progress.	No many decision, as most of it taken by the GD.	No more actions been taken, as the GD keep control the implementation process.	Set communication plan, doing self-assessment and regular meetings to check the implementation progress.	Board meeting notes 23 rd June 2014. Board meetings 20 th Oct. 2014	Most of the interviewees agreed that holding meetings to check the hospital progress and doing self-assessment were

	When were these decisions taken?	Different times through a board meetings.							the main actions. While two of the interviewees mentioned that no many actions been taken, as the GD keep control everything.
	3. Does the hospital management have the authority to take any actions related to implementing TQM? How?	Not that much.	Not that much.	No. It is a very limited as the GD keep the hospital under control.	Not that much authority, as the GD approval needed.	The authority to implement what the GD already decided for the hospital.	Not in wide extent, they just apply what the GD decided for them.		The hospital management have very limited authority. They just implement what the GD decided for them.
	4. How does the hospital prepare to take any action related to TQM implementation ?	Check the hospital's ability to do what the GD asked them to do. Trying to motivate staff to be involved in quality implementation activities.	There is no many preparation, as the hospital implement what the GD asked to be implemented.	Sometimes, discuss the GD decision through a board meetings, but most of the time there is no need for any preparation, as all set by the GD.	There is no need to do preparation as the GD already save the hospital efforts for this.	Board meetings to discuss the GD decision.	No need for preparations as the hospital implement what the GD asked them to be implemented.		The main action the hospital do it when the GD asked them to implement decision is doing board meetings to discuss that, however, and in sight of that there is no need for many preparations.

1.6. Monitor and Evaluate	1. Who is responsible for evaluating and monitoring TQM implementation ? How? Why?	Its shared responsibility between the hospital and the GD. The hospital do not have authority for this.	Shared responsibility between the hospital management and the GD.	The hospital management and GD check the hospital reports after that.	The hospital doing the evaluation and send the evaluation reports to the GD to go through it in details.	The GD but the hospital should do that before, and the GD will check this in depth.	Its shared responsibility between the hospital management and the GD.		The responsibility of this its shared between the hospital management and the GD.
	2. How does the hospital deal with any delays in making decisions? Why? Can you give an example of that?	If it is related to the GD authority then can ask for speed up the process of that decision either by request meeting with them or by phone call.	I can do nothing just check the situation with the GD because the decision is out of my authority.	I asked the hospital manager to contact the GD to check with them.	If there is a delay that is mean the decision out of the hospital authority and then I do not have much to do just ask the GD to speed up the process.	There is nothing to do as the GD process normally take a long time.	If the case is out of the hospital authority, then there is nothing to do, just wait the GD approval.		The delay problems always happened because of the GD process take a time and the hospital management could not do anything regarding that just request to speed up the process.
TQM Implementation									
2.1. Senior Management Commitment (SMC)	1. Has the senior management made a plan to implement TQM? If yes,	Yes, depends on what the GD asked to do, however, the hospital management	It is not the hospital plan, we implement what the GD asking to do.	Yes, started with choosing the staff who enrolled in the implementation process, with put in	Not that much, everything was done from the GD.	Yes, but this plan considered what the GD asked to do, not what the hospital	As I know, it is the GD plan and the hospital just started to implement it.		It is not obvious if the plan was set by the hospital or they just fellow what the GD asking them to fellow.

	how? If no, why not?	can't plan for this by own.		consideration what the GD asked to do.		management need to do.			
	<p>2. Which actions were taken to ensure that there is a commitment from the senior management?</p> <p>When were these actions taken?</p> <p>Who did this?</p>	Regular board meetings is the main action been taken. However, SM keep high level of commitment always.	Regular meetings for the board members is the main action. That was decided from the early steps of the implementation.	No many actions been taken regarding that, as the SM have to keep this commitment. The interviewee did not explain more why they have to keep high level of commitment.	Regular meetings and the inspectors from the GD were the main reason to keep this commitment.	Meeting with the board members regularly is the main reason to keep this commitment.	Which commitment the interviewee said, the SM if they have a commitment that is because they do not want to lose them positions.	There were many regular board meetings has been held according to this issues.	The main actions to maintain the SM commitment regular board meetings and the GD inspections. While interviewee A12 mentioned that, the main reason for this commitment was the idea of the SM to lose them positions if they do not have commitment regarding the implementation.
	3. What barriers impeded TQM implementation ?	Do not have enough authority (financial and managerial authority)	The limitation of the hospital authority.	The limitation of the hospital authority is the main barrier.	The GD keep high level of centralisation in decision-making, which considered as the main barrier.	There is almost no authority for the hospital management.	The GD approval needed in almost every single step.		The limitation of the hospital authority is the main barrier.

	4. How did the senior management avoid or negate these barriers?	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable
	5. Has the senior management communicated with the employees to minimise these barriers? If yes. How? If no. Why not?	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable
	6. Has the senior management the authority to evaluate employees' performance? If yes. How? If no. Why not?	Its shared responsibility between the hospital management and the GD.	Shared responsibility with the GD.	Its shared between the hospital management and the GD.	The hospital doing the evaluation and send it to the GD.	Shared responsibility with the GD, as the hospital cannot do this without the GD.	Shared responsibility between the hospital management and the GD.		Its shared responsibility between the hospital management and the GD.
	7. Has the Governmental dept. granted the local hospital managers responsibility and authority?	In some instances, yes. Just to decide how to implement the decision which	Not that much, just to choose how to implement the GD decision.	The hospital implement what the GD asking to be implemented.	It is a restriction authority.	Very limited authority, as the GD approval needed usually.	The hospital already has a limitation authority, so there is no support from the GD. We implement what		Very limited authority, most of the time the hospital implement what the GD asking them to be implement not

	If yes. How? If no. Why not?	is already taken by the GD.					they ask as to do, and that is it.		what the hospital needs.
	8. Does the hospital have the appropriate knowledge to implement TQM? How?	No, because there is no enough training about that.	Not really, because the hospital did not have the appropriate training.	Not really	Not really	Just a basic knowledge.	It is restricted among the top management.		Not that much knowledge is available.
	9. Have you ever refused to implement any decision before? Yes/No. Why?	No, because I do not have the authority to refuse decision been taken by the GD.	No, we do not have this luxury options to accept or refuse decisions.	No, and as I knew nobody has done this before. There is no authority to do this.	No, because I already knew I have to apply it whatever was.	No, because there is no flexibility with that from the GD.	No more options available wheatear to refuse or accept.		It seems that nobody even thinks to refuse any decision because they believe that they have to implement any decision.
	10. Were there clear objectives set for implementing TQM? Yes/No. Why?	Yes, which make it easier to be implemented.	As I think, yes.	Not really, as there is limited knowledge regarding that.	Not that much.	In light of the limitation of the hospital knowledge, yes it is clear.	Yes, as much as possible, because the hospital already suffering from limited authority.		The hospital tried to put clear objectives as much as they have knowledge about that.
	11. How is the progress of TQM implementation monitored? By whom?	By the hospital board meeting which is sent later on to the GD.	By the hospital management and the GD as well.	Hospital management.	Regular reports which are done by the quality committee	Its shared responsibility between the hospital management and the GD.	Shared between the hospital and the GD.		Its shared between the hospital management and the GD.

2.2. Staff Involvement (SI)	1. Who was responsible for deciding how many people would be involved?	The hospital manager	The hospital manager	The hospital manager	The hospital manager	Hospital manager.	Hospital manager and board members.		The hospital manager is responsible about that.
	2. Who chose the people to be involved?	The hospital manager and the Quality Committee	The hospital manager and quality committee.	The hospital manager and the departments managers	The hospital manager after asking the departments managers.	It is shared between the hospital manager and the departments' managers.	Hospital manager	Board meeting on 27 th May 2014, which is discuss who are going to involve in this.	It is sharing responsibility between the hospital manager and departments' managers.
	3. Have you had any experience of working in a group in the TQM implementation process? How did that go? What do you think about it? Do you think it works?	Yes. It was helpful and effective.	Yes, and it was helpful.	Yes, and it was good and help me to have a rich knowledge from my colleagues.	Yes, and it was helpful.	Yes and I do not think there is any difficulty with it at all.	Yes, and it was effective.		The interviewees agreed that using teamwork was helpful.
2.3. Training	1. Who is responsible for deciding which training programme you have to enrol with and why?	Training and development department.	The training development department.	The training development department.	The training department.	Training development department.	Training development department		The training and development department.

	<p>2. Have you made/ participated in a plan for the training programme?</p> <p>If yes. How? If no. Why not?</p>	No, I leave this to the training and development department.	No, because it is not my responsibility to do that.	Just suggest it but not planning for it.	No, this is not my responsibility.	No, I prefer to leave this for the training department.	Just suggested programmes, but the one who responsible bout that is the training programme		Most of the interviewees agreed to leave this to the training department, however, interviewee A12 only suggested before.
	<p>3. Was there a special training programme planned and implemented to support TQM implementation ? Why? When? By whom? To whom?</p>	Yes, as Basra health directorate held presentation at the beginning of the implementation.	Yes, at the beginning of TQM implementation within the first 3 months, by Basra health directorate.	Yes, that's happened at the beginning by Basra health directorate within the first 4 months	Yes, by Basra health directorate.	As I mentioned before, that's was just at the beginning by Basra health directorate, and then the quality committee did some training to for the staff.	Basra health directorate held presentation at the begging of the implementation and then quality committee trained some staff as well.		Basra health directorate held presentation at the beginning of the implementation for the hospital manager and the board members.
	<p>4. Was any external consultant used? If yes. Why? If no. Why not?</p>	No, because the GD not allowed us to do that.	The outside consultant was used at the beginning of TQM implementation and just for the board members.	The only external consultant was used just at the beginning by Basra health directorate.	The governmental consultant, which was at the beginning of the implementation.	Only at the beginning, which was from Basra health Directorate.	Just at the beginning by Basra health Directorate.		The only external consultant used was from Basra health directorate, and that's was at the beginning of TQM implementation

									because there is a complicated procedures should follow it to get approval from the GD regarding that.
	5. Do you think you have appropriate training to make decisions? If yes. How? If no. Why not?	I think it's come with years of experience more than the training.	Years of experience important more than any training	I do not have training about that just my experience within this area as a manager.	I do not need it, as a manager, my experience is better than any training programmes.	I use my own experience regarding that, but there is no specific training about that.	No, and most of the staff not interesting in this kind of training.		Staff considered them experience is more important than any training programmes.
	6. Have the managers had the previous training of TQM implementation ? If yes, what training have they received? When? If no, why not?	No, only few things from the first presentation and the quality committee.	No, only simple information from the first presentation and when I need anything I can ask the quality department.	Not really, just a basic thing from the first presentation and few more things from the quality committee.	Not that much, only few information they got it from the governmental consultants.	No, they not. The interviewee had nothing to add.	No, they do not. Because it is all new issue to work with and there is almost no fund for that.		Most of the hospital managers they did not have any training regarding TQM implementation just the one which is occurred at the beginning of TQM implementation by Basra health directorate.
	7. Does the hospital management	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable

	have a special policy to manage unsatisfactory training results? How?								
	8. Have the managers had previous experience of TQM implementation ? Yes/No. If no, why not?	No. the interviewee did not know why.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable
2.4. Employee Empowerment (EE)	1. Who is responsible for empowering the employees to make a decision?	The hospital manager who is already has limited authority.	The hospital manager.	The hospital manager	The hospital manager	The hospital manager	The hospital manager		The hospital manager
	2. Does the senior management support the employees' decisions regarding TQM implementation ? If yes. How? If no. Why not?	Yes, but only with specific staff. Like staff with years of experience.	To be honest we not really considered staff opinion, as there is already limited authority.	Not really, as there is limited authority to the hospital management and these opinion most of the time not go further so no point to ask for it.	Yes, but only staff with years of experience and cannot guarantee to consider it as well.	For me I asked for staff opinion, but the problem with the authority, as most of the time these opinion not considered by the hospital management.	Sometimes yes, but most of the time it is not.		The limitation of the hospital authority caused to not consider staff opinion, as the hospital cannot go further with this opinion.

	3. Have the staff been empowered to make decisions regarding TQM implementation ? Yes/No. If yes how? If not. Why?	Yes. Quality committee and managers department as well have the authority to make decisions insight of TQM implementation.	Yes, especially the quality committee.	No, only the board members and it is very limited.	No, it's restrict only to the top management	Not that much, as the GD keep high level of centralisation in decision-making.	Not that much, as there is already limited authority.		Most of the interviewees agreed that staff did not be empowered, as there is no that much authority to authorise them. However, interviewees A7 and A8 responses that there were empowerment to the staff.
	4. Do the employees accept the empowerment? How? Why?	Yes, if it was with GD rules. Otherwise, they refuse it. Because they are enjoying when they have authority.	Yes, they accepted it because people enjoy when they have authority.	There were no empowerment.	I think they will mind it, because this will put them in troubles if something wrong happen.	I do not think so, as they are afraid to do mistakes.	No, because there is no support from the top management for them.		Staff being afraid to be empowered because there is no support from the top management if something wrong happen.
2.5. Continual Improvement (CI)	1. Who was responsible for choosing which methods would be implemented? Why was this method chosen?	The hospital manager and the board members, and within the GD rules.	The hospital manager and the board members as well.	Its shared decision between the hospital manager and the departments' managers.	The board members through the board meetings.	People afraid to make mistakes, so when the decision have been shared with another is	The hospital manager and the board members and of course insight of the GD rules. Staff was not be part of this.	There were many board meetings confirm this. Some of these meetings are:	The hospital manager and the board members who are responsible for choosing which method and in

	What do you think about it?					more relaxed for them.		22 nd August 2014, 29 th May 2015	light of the GD rules. While interviewee A11 and A12 mentioned that, staff afraid to be empowered as they afraid to make mistakes.
	2. Have you had training in this method? Yes/No. Why?	I have simple ideas about it.	I have few ideas about it, which is enough for me.	The quality committee gave us some ideas about it and that is it I do not need training about this.	No, maybe because we think there is no need for this.	Only the basics which been told by the GD and the quality committee.	The top management not really interested to have training about this; they are satisfied with only some information about it.		Staff did not have any training regarding that. Only few ideas they got it from the governmental consultants and the quality committee.
	3. Has anyone explained to the staff about the method type and what the point of it is? Yes /No. why?	Yes, to be more familiar with it.	Yes, they know what the reason from these methods.	Yes, but only few details about it, to understand what is going on around them.	Not that much, as there is no point to explain that for them.	Not that much, just the basic.	Just the main points not in details. I think that is because the hospital management did not have appropriate knowledge about it.		There was very brief knowledge about the method type.

	4. Has anyone asked you about your opinion on the method they want to implement? By survey, questionnaire or anything else?	Yes, most of the time is face to face within the board meeting or by the Quality Committee.	Yes, for me most of the time face to face at the board meeting.	Yes, because I am one of the hospital board members.	Yes, that was by face to face and through the survey.	Yes, by face to face through a board meetings.	Yes, and most of the time that has happened face to face.		The interviewees agreed that they been asked about them opinion by face-to-face meetings.
2.6. Communication	1. Was there a communication plan for TQM implementation ? Why? When? By whom	Yes, which is helped in the hospital evaluation.	Yes and this plan is target to link the hospital management with the GD.	Yes, as the hospital management send the evaluation reports to the GD every three months.	Yes, every 3 months the quality committee send the evaluation reports to the GD.	Yes, the communication channel link the hospital management.	Yes and this channel help the GD to share in the evaluation process.	Hospital communication plan which was set by the board meeting on 27 th of May 2014.	Yes, there is a communication plan, which link and facilitate the evaluation process under the GD supervision.
	2. Was this plan implemented?	Yes	Yes	Yes	Yes	Yes	Yes		Yes

Appendix 6: Summary of First Interviews of Case Study (B)

Interview questions	Element of the theoretical framework	Interview responses B1	Interview responses B2	Interview responses B3	Interview responses B4	Interview responses B5	Interview responses B6	Documentary Evidence	Pattern Summary
Decision-making									
1.1. Identify the decision to be made.	1. When was the decision made to use TQM?	The first idea was in late 2011, but the real decision was in 2013.	in 2013	2013	2013	2013, but the interviewee did not be part of it till recently	2013	A formal letter from Iraqi Health Ministry to all Iraqis hospitals on 14 th November 2013.	The decision to implement TQM was first considered in November 2013 But didn't be activating until early 2014.
	2. Who made this decision?	The hospital manager and the board members started the first idea but the GD who made the decision	The Iraqi health ministry	The Iraqi health ministry	The Iraqi health ministry	By the GD	The GD.		The decision was made by the GD.
	3. What happened?	The hospital starts to plan how to implement TQM within the hospital knowledge and the first thing was create an internal team to	The hospital starts planning how to implement TQM and who will involve with this.	Formed the quality committee was the first thing	Formed the quality committee was the first thing to start with and then plan how to implement TQM.	Form the quality committee.	the hospital started by decided who is going to involve in the implementation processes		The hospital started implemented TQM by formed the TQM committee and how is going to involve in the

		start to shape the TQM implementation plan.							implementation processes.
	4. Why was that?	Because it is something new to the hospital and it will be better if there is a special team or group responsible about implement it.	Because the hospital did not know a lot about how to implement TQM, so formed quality committee was the first thing to do it as they will concentrate more about the implementation process.	Because the GD asked us, do this.	As I remember, the GD asked to do this first.	Because this is the best way to put the situation under control.	Because the GD asked them to do that.		Interviewee B1 and B2 response that because TQM implementation it is new for the hospital and with quality committee its will be easier to the hospital to know a lot about that, while the others of the interviewees response that because the GD asked the hospital that.
1.2. Gather information	1. Who is responsible for gathering information for making decisions related to TQM implementation ?	The hospital manager and the quality committee as well.	The hospital manager and the quality committee	The quality committee and the department's manager could share in this as well.	The quality committee	The quality committee and the department managers as well.	The quality committee.		The hospital manager and quality committee who are responsible for gathering the information and interviewee B3 and B5 add the

									department's manager as well.
	2. How does that work?	The hospital has a data base include everything about the hospital, in addition there is a company (Digi Net) works as a partner to the hospital to help them gathering the information.	The quality committee and Digi Net company work together to gain as much as they can information.	The quality committee and the Digi Net company work side by side to gather the information	The quality committee have a mobile teams collect the information from the hospital department, in addition the Digi Net company help the hospital with that.	The quality committee have around three mobile teams, collect information from the hospital departments.	Quality committee includes one-member staff from each department and this person who is responsible for gathering information from it.		The quality committee asked the hospital staff regarding the issue they want to know about it by a mobile team, which includes one person from each department, and the Digi Net company help the hospital with that. Interviewee B1 mentioned for the hospital have a database use it for this purpose as well. (Interviewees B5, B6 didn't mentioned to the Digi Net company help)

	3. What are the hospital's methods for gathering information?	By asking the staff face to face and Digi Net company assist to create a database to store what the hospital have from information in this base, which is reduced wasting time do more research.	First, the hospital has a database includes what they have of information. Second, asking the staff regarding any problem the hospital face it.	The quality committee asking the staff face to face, in addition the back to the hospital database and check if any information there could help.	Check the database if it is have any useful information regarding the problem the hospital face it, also, asking the staff who have knowledge about it.	Asking the staff face to face.	Doing survey or asking the staff face to face, it is the most popular one.		The Digi Net company help the hospital to establish database includes what the hospital have of information. Interviewees B5 and B6 did not mentioned to Digi Net company as well.
	4. What do you think about these methods?	Effective especially when Digi Net starts to help with that.	Yes, it is effective.	Yes, I think it is effective.	Tell now, the hospital did not face any problem with it.	I can tell yes. (The interviewee was not look really satisfied about it).	Yes, I think it is the best way at the moment.		All of the interviewees said its good way to gather the information except interviewee B5 was not happy with it.
1.3. Identify the alternatives	1. How were the alternatives for TQM implementation identified?	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable
	2. Was any alternative for TQM	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable

	implementation considered? If yes. What? If no. Why not?								
	3. Who was responsible for identifying the alternatives?	If it's available then the hospital board members and quality committee who are responsible about it.	The hospital board members and quality committee.	The hospital board members and quality committee.	The hospital board members and quality committee.	The hospital board members.	The hospital board members.		If the alternatives available then, the hospital board members who is responsible about that. (Interviewee B5 and B6 did not mentioned to quality committee role in this).
1.4. Choose from the alternatives	1. Who was responsible for choosing between the alternatives?	As I said before, the hospital board members and quality committee.	The hospital board members	The hospital board members and quality committee.	The hospital board members and quality committee.	The hospital board members.	The hospital board members.		The hospital board members and quality committee who are responsible, to choose between the alternatives. (Interviewee B5 and B6 did not mentioned to quality committee role in this).

	2. Which one was chosen?	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable
	3. Has the hospital management considered employees' opinions in choosing between the alternatives? If yes. How? If no. Why not?	Contribution the staff in decision-making process is one of the main hospital concepts and that's happens by meeting face to face.	Yes as the hospital asking the staff about them opinion and that is by meeting face to face with them.	Most of the time, yes, and sometimes the hospital manager take the decision by himself.	Yes, by meeting the staff face to face and asking them about them opinion and that's happened with the staff who have authority to participant in decision-making	The hospital doing that with particular people who have authority to be as apart in decision-making process.	Yes, the hospital management consider the staff opinion.	There are some examples the interviewees mentioned for it, but the researcher could not find evidence to support that.	The hospital management consider the employees opinion especially the staff who already have authority to participant in decision-making process and that has happened by meeting them face to face.
	4. What is the hospital's process for choosing between the alternative decisions?	Board meeting is the most appropriate way to discuss about that and in some cases could do meeting with particular people.	Board meeting or ask specific staff to make decision.	Board meeting	Board meeting	Board meeting	Board meeting		Board meeting is the popular one and in some cases could do personal meeting with specific staff.
1.5. Take Action	1. Was the TQM implementation decision	Of course as the hospital already was thinking about it, and the	Yes, actually the hospital was seriously think about TQM	Yes, the hospital did board meeting to	Yes, and the hospital discussed the implementation	Sure, and the board members tried to go through	Yes and the first board meeting included the implementation	Board meeting notes on late of December 2013	It was fully supported by them as the hospital was

	supported by the senior management? How?	first thing the hospital did it was make a board meeting to discuss how start implementing TQM.		discuss how to implement TQM	process in urgent Board meeting	the implementation process details as much as they can in urgent meeting	plan and who is going to involve in.		thinking about this before and the details for implementation procedures discussed through the board meeting.
	2. What decisions have senior management made regarding TQM implementation ? When were these decisions taken?	The first decision was doing self-assessment to the whole hospital to know where the hospital stands at that time.in addition, discussed who are going to involve in the implementation processes. That's happened just a few weeks after informed the hospital about the implementation decision.	When the hospital did a board meeting, the first decision was made is doing self-assessment, and that's was within the first two months.	Self-assessment was the first thing did it, and that's was within the first two months.	First step was doing self-assessment to be aware where the hospital stand and that was within a few weeks.	Self-assessment was the first thing they did it, which is happened within the first two or three months.	Board members and the hospital manager decided to do self-assessment for the whole hospital and this decision was made on the first three months.	More than three self-assessment reports, the first one was in January 2014, the second one was in November 2014, and the third one was in November 2015.	The first step was doing self-assessment to know the current situation for the hospital, which is happened within the first 2-3 months
	3. Does the hospital management	Yes, almost full authority, just at the beginning	Yes, just the first decision to implement	Until now I can't remember issue the hospital	When the decision was made to	I think so, as in my own knowledge we	In my opinion yes as I can remember there	There are some formal letters in different times	The hospital don't have to ask the GD

	have the authority to take any actions related to implementing TQM? How?	the hospital was asking the GD as they were more expert with TQM than the hospital.	TQM was form the GD, and then the hospital could manage everything in the implementation processes.	couldn't make decision regard it.	implement TQM by the GD, the hospital have the right to do whatever without go back to get approval from the GD.	don't have to back to the GD to get approval from them regard any issue	is something, the hospital did not have authority to make decision about it.	in 2014 between the hospital and the GD asked about some issues regard the TQM implementation but the researcher just had a look for it and could not have a copy.	about the any issue as they have the authority to face any problem (or almost everything)
	4. How does the hospital prepare to take any action related to TQM implementation ?	At the beginning the hospital tried to do training programmes to the staff to let them be familiar with the TQM procedures and that's help them to have more confident in themselves regard TQM implementation	Training programmes at the beginning helped the staff and the hospital to move on in the implementation processes and then the regular meetings with staff to discuss the new issues need to make action about it.	Training programmes and study the situation in details to take the right action later.	Board meeting and training programmes in addition the regular meeting all of these helped the hospital to be sure regard any action need to do it.	By study the situation in details and asking the people who have more knowledge about it.	Going through the situation's details and asking the expert people regard it.		Training programmes and study the issue in details in addition asking the expert people, all these steps consider when there is an action should be taken regard thing.
1.6. Monitor	1. Who is responsible for evaluating and monitoring TQM	Every single person responsible to monitor his work, and each department's	Every one responsible about doing his own job in the right way and his manager	Each department's manager responsible to evaluate his team and the	Quality committee who is responsible about that, but even the department's	Quality committee of course who is responsible about that. Normally they	Department's managers doing this each month and the quality committee doing evaluation	Some of the monthly evaluation reports and the quality reports as well in	Each department's manager evaluates his team and the quality

and Evaluate	implementation ? How? Why?	manager responsible about evaluate his staff, then the quality committee responsible to evaluate the whole hospital in unknown times.	who is doing direct evaluate for him. The quality committee who is responsible about evaluate the hospital in general and normally that is happen in different times.	quality committee doing evaluation for the whole hospital.	manager doing evaluation to the people who is working with.	doing this in unusual time or in different times	for the whole hospital in not specific time which is let the staff to expect that at any time	different times between 2014 and 2015.	committee doing evaluation for the whole hospital in non-schedule time.
	2. How does the hospital deal with any delays in making decisions? Why? Can you give an example of that?	First, doing check why there is a delay in making the decision, if it's something really big then will put a plan to fix it as soon as possible, and if its normal situation then going to deal with it directly	At the beginning we will do check to know why there is delay in the decision and then if its within quality authority will try our best to make the decision directly but if it's not then we will contact the hospital manager and maybe can make action regard that by himself or by the board meeting	Check the case details and then contact the person or the department who is responsible about the delay to know why they did not make any action and try to facilitate it as much as possible.	If the delay is within my authority then I will make action as soon as I informed about the issue, while if it is not then I will contact the quality manager or the hospital manager to let them do what I could not do it.	Actually, I did not face problem like this before but if it has happened, I will contact the quality committee to let them deal with it if I couldn't that.	The quality committee and the hospital manager can deal with it very easy as they have authority to solve any problem could the hospital face it.		To deal with any delay in make a decision, the hospital will check the situation details and try to make action regard that by back to the quality committee or to the hospital manager to make decision or in some cases could do that by board meeting.

TQM Implementation									
2.1. Senior Management Commitment (SMC)	1. Has the senior management made a plan to implement TQM? If yes, how? If no, why not?	Yes, that has by discussed the department's objectives through the staff meeting and what the staff expect form the TQM implementation ? Moreover, after that choose the people who are going to involve in the implementation processes.	Yes, each department's manager did meeting with the staff who working with and asked them about the departments objectives and what they are expect from the TQM implementation.	Chose the staff that are going to involve in implementing TQM and determine what programmes could help the hospital staff to be more understandable for TQM.	At the beginning each department's manager hold meeting with the staff whom working with what they expect from TQM implementation, and who is interested to be as a part of this.	Each department put a brief of the objectives they are looking for and what is the timetable to reach these goals, this is helped later on the hospital management to make a plan.	Yes, by choose the people who are going to involve in the implementation of TQM and which training programmes the staff need it.		The whole of hospital department's managers hold a meeting with the employees who are responsible about them, to ask about what they expect from the implementation of TQM and could involve in this. Interviewee B3 and B6 added decided which training programmes could the staff enrol to help them be more familiar with implementation processes.
	2. Which actions were	Quality committee	As a quality committee	Direct supervision by	Board meeting was occurred to	Board meeting was hold to	The hospital hold a board	Hospital board meeting on late	Quality committee

	<p>taken to ensure that there is a commitment from the senior management?</p> <p>When were these actions taken?</p> <p>Who did this?</p>	<p>responsible to ensure the SM keep commitment in the implementation of TQM by the progress report and direct supervision. Board members discussed that on the early of the implementation steps.</p>	<p>manager, myself, and my team responsible to ensure the staff and SM keep them commitment in high level by direct supervision and check the progress report regularly.</p>	<p>the quality committee is the best action to ensure the SM keep commitment in TQM implementation. This action was decided from the early of the implementation processes.</p>	<p>explain more about the implementation benefits and processes, to let the board members be more understandable for TQM and that was within the first steps of TQM implementation as I remember within two months of the implementation decision.</p>	<p>discuss the implementation benefits and how the quality committee will be responsible about the hospital progress, which is mean playing supervisor role for the whole hospital. That has happened within the first two months of the implementation processes.</p>	<p>meeting within the first two months to discuss the implementation plan and decided who is going to involve in this in addition, doing a regular meeting to check the progress reports for the whole departments which is lead these departments to keep them commitment regard TQM implementation.</p>	<p>of December 2013, which is contained asking the board members and the departments manager about them opinion regard TQM implementation, and they suggest to use external consultant at the beginning to help in the implementation of TQM.</p>	<p>playing a vital role in supervision operation, as they check the departments progress reports which is lead to keep high level of commitment from them to the implementation processes, further doing regular meeting could help with that as well. That has happened within two months.</p>
	<p>3. What barriers impeded TQM implementation ?</p>	<p>At the beginning, the limitation of the staff knowledge was the main barrier as the TQM its new thing to the hospital, but at the current time,</p>	<p>When the hospital started implement TQM the main problem was the staff did not know anything about TQM, and how could let the staff gain</p>	<p>The limitation in the staff knowledge was the main obstacle for TQM implementation, as how could implement thing without any</p>	<p>I remember on the hospital staff said “it’s will be impossible to implement TQM within the Iraqi situation”, as the government</p>	<p>Most of the hospital staff they did not believe that the hospital could implement TQM, because of the government</p>	<p>I think the staff’s poor knowledge was the main barrier for TQM implementation.</p>		<p>The limitation in the staff knowledge for how to start implement TQM was the main obstacles at the beginning.</p>

		I do not think there is something could impede TQM implementation especially when we get ISO certificate last year.	knowledge about it and at the same time did not take long for that.	knowledge about it.	keep high level of centralisation and its will be the same with TQM.	managerial procedures, as they will not give to the hospital enough authority for that. Further, the staff did not know a lot or almost anything about TQM.			
	4. How did the senior management avoid or negate these barriers?	By concentrate on training programmes and how to let the staff enrol in as much as possible to gain information about implementing TQM, and using external consultants were the best thing to start with in the implementation processes.	Training programmes was the main point to negate this barrier, but the problem was who can do this, as no one from the staff knows a lot about TQM. For that, the hospital makes a deal with external consultant to do that.	Let the staff know about TQM was the big problem as no one from the staff had a god experience regard TQM implementation, so the hospital decided to bring an external trainers to help with that.	At the beginning the hospital was worried about the centralisation policy for the government, and if the hospital have a big space of authority or not, and this worries was gone when the government inform the hospital they have authority to decided how	Get assistance from external consultants was the best thing can the hospital do it, as the hospital staff have no experience how to implement TQM at that time.	External consultants were the solution for this barrier as TQM implementation new for them and they need some help to understand how it is going work.		The hospital have no idea how to implement TQM when the decision was made from the government, for that the hospital decided to used external consultants to help them with that. Interviewee B4 add the staff was worried about the centralisation policy for the

					to implement TQM.				government at the beginning but after that they realised the hospital management have authority to decided how to implement TQM.
	5. Has the senior management communicated with the employees to minimise these barriers? If yes. How? If no. Why not?	Yes, but not with anyone from the staff, just with board members and department's manager as well, as that will not waste the time in addition they have more experience how to deal with different issues.	Board meeting was hold and another meeting for the department's managers as well to ask them about the best way to implement TQM, in addition external consultants was the suggestion to help with that.	Not at the beginning, as the staff already had a poor knowledge regard the implementation process.	Not applicable	The hospital did not have that much knowledge about the implementation processes at the beginning, so the hospital management left these to the external consultant to deal with it.	Yes, this is happening at the current time, but at the beginning, it is not applicable, as the staff still not familiar with TQM yet.		The hospital hold board meeting in addition meetings with the department managers asked them how to deal with these barriers, even if that's didn't happened at the early steps of the TQM implementation but still the top management consider the staff opinion.
	6. Has the senior management the authority to	Yes sure. Each departments manager have authority to	Yes. Department's manager doing that every	The department's managers doing that for them	Yes, they have it, and they did it monthly in addition, there	Yes, actually there is a monthly evaluation and	Yes of course and they did that with performance		Yes, the senior management have authority to evaluate his

	<p>evaluate employees' performance?</p> <p>If yes. How? If no. Why not?</p>	<p>evaluate his staff as there is like a simple one happened every month and there is another one happening at the end of every year.</p>	<p>month, further there is another one happening at the end of each year to evaluate the whole things in details.</p>	<p>staff, in addition, there is special department who is responsible to follow this in details which is called (performance evaluation department).</p>	<p>is annual one as well.</p>	<p>annual one as well. The monthly one is a simple one and it is just going through few things, while the annual one have more details.</p>	<p>evaluation department help, as this department supply the managers with evaluation forms, which is back to the same department after the managers finish from it. Also, there are two different of the evaluation forms a monthly one which is going through the thing briefly and annual one which is check everything in details.</p>		<p>staff and they did that monthly and at the end of each year within the performance evaluation department help.</p>
	<p>7. Has the Governmental dept. granted the local hospital managers responsibility and authority?</p> <p>If yes. How? If no. Why not?</p>	<p>Yes, and that is within the rules of non-governmental organisations, which is already was decided by the government and consider to give more</p>	<p>Yes, as the government after war in 2003 started to minimise the interventions in the private sector procedures.</p>	<p>I can say yes, as until now the hospital did not back to the GD to have permission from them regard any issue.</p>	<p>Yes, as I cannot remember the hospital asked approval from the government regard any issue in TQM implementation.</p>	<p>I thinks so, I didn't heard anyone from the hospital management said we still wait approval from the government to implement x.</p>	<p>Yes and I think that has happened after the last war in 2003.</p>		<p>After the war in 2003, the government authorised the local managers in private sector to make their own decisions. As until now the hospital did not</p>

		authority for these organisations.							asked permission from the government regard any issue.
	8. Does the hospital have the appropriate knowledge to implement TQM? How?	Of course not at the beginning and for that the hospital asked for AGS institution help.	When the decision was made to implement TQM the hospital knew few things about it, for that asked for external consultants to do training for the staff.	At the moment yes, but when the hospital start implement TQM not much and that is why the hospital used external consultant at the beginning.	The managers had a few ideas about it at the beginning but they did not have a real training, for that, they asked AGS help at that time.	No, of course not when the decision was made to implement TQM unless some of the managers did training but not in the hospital. In general, I can say no.	Yes, as most of the staff did many training about that, especially when the hospital used external consultant for that.		The hospital staff did training about how to implement TQM and for that, they have the appropriate knowledge regard it.
	9. Have you ever refused to implement any decision before? Yes/No. Why?	Normally, the decision is taken by myself or within the board members help. But if the decision come from the government I think I can refuse it if it's not help to improve the hospital	No, I did not. Maybe because I did not see any decision could not help the hospital situation, or it is the wrong decision and supposed to be not implement it.	No because the hospital did not enforce us to do what we think, it will not help the hospital.	I remember at the beginning I refused the TQM implementation decision but then when I did more discussion about it with the staff I was happy to implement it.	No, because the decisions normally discussed by the board members and the hospital manager as will and I think they have more experience than I do.	No, not because I cannot do that, but because I believe in the hospital management ability to make the right decision.		The interviewees did not refused a decision because they know already the decision did not come by one person, as the hospital make the decision through a board meeting or at least within a

									rich knowledge about it.
	10. Were there clear objectives set for implementing TQM? Yes/No. Why?	Yes, because the hospital management was interesting in TQM implementation even before the GD decision, which is making them need to implement it in the right way from the first steps.	In the light of the limitation of the hospital knowledge at the beginning yes, it was clear and of course, the hospital management did a polish for it later on when got more training.	I think it's clear enough for the staff especially within the limitation of the hospital management knowledge at the beginning of the implementation processes.	Yes, it is, as the hospital consider that will help the staff to know what are them role in the implementation procedures.	Yes, because that is will help the staff to know exactly what they have to do.	Yes, as that will help the staff to make the implementation easier for them.		The implementation objectives was clear from the beginning even with the limitation of the hospital staff about the TQM as they believe the clear objectives it's easy to follow and easy to implement as well.
	11. How is the progress of TQM implementation monitored? By whom?	By the quality committee and the board meetings at the same time.	The quality committee who is responsible about it in addition the board meeting check the progress report as well.	By the quality committee	By quality committee and the board meetings.	By the quality committee.	By the quality committee		Quality committee and the board meeting they are responsible about monitoring the TQM implementation.
2.2. Staff Involvement (SI)	1. Who was responsible for deciding how many people	Hospital manager and board members.	The hospital manager and board members.	The hospital manager and board members.	Board members and hospital manager.	Hospital manager and board members.	Hospital manager and board members.		The hospital manager and board members who are

	would be involved?								responsible about that.
	2. Who chose the people to be involved?	The hospital manager.	The hospital manager and sometimes-asked quality committee to help him with that.	The hospital manager	The hospital manager	Hospital manager and could ask for the quality committee opinion as well.	Hospital manager	Board meeting on early of 2014, which is discuss who are going to involve in this.	The hospital manager who is responsible about that and sometimes could ask for the quality committee opinion as interviewee B2 and B5 said.
	3. Have you had any experience of working in a group in the TQM implementation process? How did that go? What do you think about it? Do you think it works? Is there any difficulty with it?	Yes and it was helpful for me as I knew a lot of thing from it. No, there is no difficulty with it as the whole team was good. (The interviewee adds to define what his mean by the team was good; that is mean the team was almost within the same level and they did not have any	Yes, sure and actually I keep working within team because this is my job as a manager.	Yes, I experimented this before and it was helpful. It was not include any difficulty and I think this is because the staff who was enrolls in.	Yes, I worked within team and it was helpful to understand many things.	Yes, and it was useful as I gained a lot of information about it, in addition its help me to know the staff much better.	Yes, and we are as quality committee keep working as a team and we did not face any problem with that.		The interviewees agree that working within team was helpful for them and they did not mentioned to any problem about that. Interviewee B1 add, when the team be within the same level its will be easier for that to understand each other.

		problem between each other).							
	<p>4. Was the use of teamwork considered?</p> <p>If yes. How and why? If no. Why not?</p>	Yes and that help to improve the progress and avoid making mistakes.	Yes, as we cannot implement TQM without working as team.	Yes, we believe that without working as team the hospital will not achieve any progress.	Yes, even if sometimes the hospital manager did not like the idea but we still keep it as a main method to reach the hospital goals. (The interviewee explained more about why the hospital manager did not like working within team in each case, as it sometimes make the employee inactive).	Yes because the hospital believes that using teamwork strategy is the more effective way to reduce the defect.	Yes especially when the hospital started implements TQM.		The hospital considered using teamwork strategy as the best way to reach the hospital goals. Interviewee B4 adds, in some issues the hospital manager did not like to use teamwork, because that makes the staff inactive to do things in personal.
2.3. Training	1. Who is responsible for deciding which training programme you have to enrol with and why?	Board members through the board meetings.	Departments manager discuses which training programme they need it with the board members who decided	Board meetings	Departments' managers and the board members who are responsible about that.	Board members through the hospital board meetings, and sometimes they discuss this with the	Board members who make decision regard that through the board meetings. In addition, they could ask the quality		Departments' managers' discussion which training programme the staff need it with the board members to

			about it meanwhile the board meetings. Further, within the issues related to the TQM implementation they ask to my opinion as well.			departments' managers.	committee as well.		make decision about that through the board meetings. In cases related to the TQM implementation, they ask to the quality manager opinion as well.
	2. Have you made/ participated in a plan for the training programme? If yes. How? If no. Why not?	No, because normally the board members who are responsible about that. However, I could amend the plan before we start in the implementation steps.	Yes, as a quality manager I am who is responsible about the training programmes related to TQM implementation. By discussion that with the departments' managers and what the staff need to be more effective in the implementation processes.	Yes. As a board member and department manager, I have responsibility to decide which training programme my staff need it.	Yes, I participated in plan before, because as a one of the board member, we have responsibility to decided which training programme the staff need it and that's happened by a discussion with the departments manager and the quality manager as well.	Actually, I just suggest a programme but participate in putting the plan for it I have never done that before.	Yes, I did both of them, participated and made plan as well, because I work as a quality committee member and this is one of my responsibilities.		The interviewees participated in plan either suggest it or shape it, except interviewee B1 who said he could amend the plan before start in the implementation procedures because this is within his authority as a hospital manager.
	3. Was there a special training programme	Yes, that has happened by the external	Yes, that's happened within the first steps of	The external consultant did a training	The external consultant did training	The whole hospital staff enrolled in a	Yes, the external consultant did		The external consultant did training

	<p>planned and implemented to support TQM implementation ?</p> <p>Why?</p> <p>When?</p> <p>By whom? To whom?</p>	<p>consultant in the early steps of the implementation. To let the staff know what are the implementation processes and what their role in it.</p>	<p>the implementation procedures by the external consultant. This training let us know many things about TQM and what should the staff do for the next steps. In addition, there are some workshops were done regard the same purpose.</p>	<p>programme for the hospital staff, each department and what his responsibility and how should improve his level.</p>	<p>programmes at the beginning, as I remember within the first two months of made a contract with them (AGS).</p>	<p>training programmes which was happened by the external consultant when they coming to the hospital at 2013. In addition, as I think the first training I did it with them was within 3 months of AGS beginning the work.</p>	<p>the first training programmes, and then the quality committee did some workshops about that as well. The first training was within the first 3-4 months of the implementation processes.</p>		<p>programmes for the whole hospital staff at the early steps of the implementation. Then the quality committee kept that by doing few workshops for the staff to let them be up to date with the implementation procedures. The first training was happened within the first of 3 months of the AGS coming to the hospital.</p>
	<p>4. Was any external consultant used? If yes, why? If no, why not?</p>	<p>Yes as I said before. Why, because the hospital at that time did not know many things about TQM and the external consultant was the best idea to</p>	<p>Yes, as I told you the first training was by external consultant and that was because the hospital has almost no idea how to start implement TQM.</p>	<p>The early steps of the implementation processes was by using external consultant, as the hospital did not had enough knowledge at</p>	<p>Yes, as I said before, at the beginning the hospital management did not know how to start implement TQM as its new thing for them, so using</p>	<p>Because the hospital did not have any experience in TQM so, they decided to use an external consultant to help them with that.</p>	<p>Yes, the first thing the hospital did it was used external consultant, as the hospital not expert yet with TQM.</p>		<p>The external consultant was the first thing the hospital was used it, as at the beginning of the implementation processes the hospital did not have enough knowledge how</p>

		help the hospital with that.		that time about TQM.	someone who already expert in it its will be better.				to implement TQM, and bring someone who already expert with it, was the best idea.
	5. Do you think you have appropriate training to make decisions? If yes. How? If no. Why not?	It is not training; I would to say expertise after too many years on this work.	I did some training before and it was a workshop in Basra university, in addition, I have few years' expertise as a manager.	No, I do not, but I have experience, which is come through a long many years working in deferent positions in this field.	No, I just use my own experience and I do not think there is a special training for that.	No, I do not. Because nobody asked about that before, in addition, most of the managers used him or her expertise in this matter and no training required regard it.	No, and I believe nobody have.		There is no specific training about that in the hospital, and most of the interviewees didn't have training like that except interviewee B2 who had a workshop in Basra university focused on decision-making
	6. Have the managers had the previous training of TQM implementation ? If yes, what training have they received? When?	Not before AGS came to the hospital and do some training to the staff.	No, they have not until AGS came to the hospital, but they were interesting and read a few things to know what TQM mean. As a quality committee	Not applicable	Before AGS came to the hospital I do not think anyone from the staff did any training about it and for that the hospital used AGS.	Training in formal way I do not think so. I believe nobody did training about something do not work on it.	No they do not, and that's was oblivious when AGS started to do training to the staff most of the managers have no idea about it.		The hospital managers in different positions they did not have any training before AGS came to the hospital. Interviewee B2 he is the one who had training in Basra

	If no, why not?		manager I did some training with Basra university before the hospital start implement TQM.						university about TQM what is the implementation processes.
	7. Does the hospital management have a special policy to manage unsatisfactory training results? How?	Yes, first will try to understand this result was because the trainer or the staff themselves, and then will deal with the situation. For example, if the trainer was the reason then we will change it.	Yes, we have policy like this, as we can change the trainer if he was the reason or give the staff kind of punishment because they did not care about the training as it cost the hospital money.	Yes, of course we have because it has cost the hospital money and we do it to improve our staff not just waste for time. Each situation is different, as it is maybe because the staff who had training or maybe because the trainers team.	Yes, we have policy like that, as we already check our staff if they found the training was helpful for them or not.	I do not think so, as I did not see someone really check if the training reaches the goals or not.	Yes, it's supposed to be because training programmes cost the hospital money, but at the same time I never heard there is something like that was happened.		The interviewees said yes the hospital have policy like this, and they do work in it, but at the same time Interviewees B5 and B6 mentioned that it's not available in real life as nobody check if the training programmes achieve the goals or not.
	8. Have the managers had previous experience of TQM implementation	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable

	? Yes/No. If no, why not?								
2.4. Employee Empowerment (EE)	1. Who is responsible for empowering the employees to make a decision?	The departments' managers or the direct manager for the staff.	The hospital manager in addition every departments managers responsible to empower his staff.	The hospital manager and the departments managers as well.	Departments managers	Each department's managers responsible about empower his employees and the hospital manager responsible about the whole hospital.	Departments' managers.		Departments' managers or direct managers who are responsible to empower his staff.
	2. Does the senior management support the employees' decisions regarding TQM implementation ? If yes. How? If no. Why not?	Yes, and that is by discuss the decision or the suggestion with the departments managers. This will improve the work procedures in addition give the employees more confident.	Yes, as this will let the staff have more loyalty to the hospital, because the hospital management consider them opinion and support it, which is help also to improve the hospital performance.	Yes, but first the hospital manager will discuss it with the department manager or with the quality committee manager to check the implementation benefits.	Yes, even if sometimes this decision did not implement because the SM refuse it, but still there is a support for the staff opinion.	Yes, at least if the decision didn't be implement but still the SM consider this as a suggestion could improve the level of hospital performance.	SM try to support what the employees decided regard the implementation processes, and I said try because in some cases they refuse to implement it, as it is not that useful for the hospital.		SM support the employee's decision but not in general as in some case they refused to implement these decisions, in addition before implement anything the hospital manager should inform about it and discuss that with the department manager.

	3. Have the staff been empowered to make decisions regarding TQM implementation ? Yes/No. If yes how? If not. Why?	Yes, as I said in the previous question, the staff have empowerment to make decision regard TQM implementation but the one who is responsible and have fully authority about TQM is the quality committee.	Yes, they empowered but it is not full authority, as still they have to ask the direct manager or the quality manager to implement a decision.	Yes, epically quality committee as they are who responsible about the implementation proses.	Yes, but the quality committee is the most one who was empowered about that. Because it is them responsibility at the end.	Yes, as the hospital management give the employees a big space to share in them opinion and in decision-making.	Yes, as I said before the SM support and empower the employees to make decision regards the TQM implementation. This empowerment will help the hospital to increase the staff confidence in themselves and in the hospital at the same time.		SM give the staff a big space of empowerment, but that's didn't mean they have to accept any decision they decided. The most departments have empowered to make decision regard TQM implementation is the quality committee.
	4. Do the employees accept the empowerment? How? Why?	Yes, most of them accept it.	Yes, because they like to be as a part of the implementation processes.	Yes, because they want to have them role in this implementation, in addition they already know the top management will support them.	Yes, they do not mind that at all, as they like to have them role in the implementation processes.	Yes, I think they enjoy having empowerment and ability to make a decision.	I think so, as I did not hear one of the staff refused that or even did not like the idea.		The employees enjoy to be empowering, as that will let them participate in decision-making and they can have them role in the implementation processes.
	1. Who was responsible for	The hospital manager and	Board members through the	The hospital board members	Board members with the	It's sharing decision	The board members who	Board meeting notes include	Hospital manager and

<p>2.5. Continual Improvement (CI)</p>	<p>choosing which methods would be implemented?</p> <p>Why was this method chosen?</p> <p>What do you think about it?</p>	<p>board members as well, as it its sharing decision between them. They choose a method that is fit to the work conditions and to the patient's benefits at the same time.</p>	<p>hospital board meetings. They will choose depend on them expertise in addition, which information they have or any feedback could help to make a decision regard the issue they face it.</p>	<p>through board meetings.</p> <p>It is the best way for that, as the decision will be sharing between the board members.</p>	<p>hospital manager. Nobody complain about this method as the decision not belong for specific department and exclude the others, which is mean dealing with the situation in professionalism .</p>	<p>between the board members, who make decision regard any issue they face it through the hospital board meetings.</p> <p>I think it is quite good as the decision belongs for more than one person and the error percentage will be in the minimum level.</p>	<p>are responsible about that and they decided through a board meeting, depend on information they already have, or them expert, at least this is what the staff think about it.</p> <p>I think it is appropriate, especially, it encourage teamwork spirit between the staff.</p>	<p>discussion about that in Feb 201.</p>	<p>board members who are responsible about choosing which method is best to implement. This method encourages teamwork spirit in addition; error percentage will be in the minimum level, because more than one person made the decision.</p>
	<p>2. Have you had training in this method? Yes/No. Why?</p>	<p>Yes, AGS did training regard that. Because the staff did not have idea about that before.</p>	<p>Yes, and that was by AGS in addition, I did one in Basra university. That was because it is something new to us and we did not have enough knowledge about it.</p>	<p>Yes, and that was when the hospital start implementing TQM, as it's something new to the hospital and need to gain knowledge about it.</p>	<p>Yes, I had. Because I did not have how this will be implement at that time, so I need to gain knowledge as much as I can to do the things in the right way.</p>	<p>Yes, as a quality member I need to be familiar with any procedure related to TQM implementation.</p>	<p>Yes, and I think the whole staff did. This is because we need to know how the implementation will implement, in addition, how the improvement will happened.</p>		<p>The hospital staff had training regard that, which was at the beginning of the implementation steps, because the staff still not familiar with the implementation of TQM at that time, in</p>

									addition, they need to know how the improvement strategy of this implementation will happened.
	3. Has anyone explained to the staff about the method type and what the point of it is? Yes,/ No. why?	In general, the explanation happened to the departments managers, and in specific cases could explain that to the employees overall.	Not for the whole staff, just for the departments managers, and in a few cases could explain that for almost the whole staff.	It is supposed to be the whole staff understood why this method was chosen, but in the reality just the departments' managers know about it.	The board members explain that to the departments' managers, and supposed from those managers explain that to the staff, but they did not do that in fact.	Normally, the board members explain just to the departments' managers, and the departments' manager they are free to explain that to the people they are working with or not.	As I know, just the departments managers who were informed about that from the board members. However, the rest of the staff just in a few cases they may know about it.		The departments managers who were normally informed about that by the board members, while the rest of staff, its back to them manger if they are going to inform them about the method or not. Most of the time the staff did not know why was this method was chosen.
	4. Has anyone asked you about your opinion on the method they want to implement? By survey,	Yes, sure, that I am one of the board members. That has happened by discussion face to face.	Yes, and that has happened by face-to-face discussion most of the time.	Face to face, discussion is the popular one to ask someone about his opinion regard specific issue.	If there is something, need to the staff opinion, se we do that by contact them directly no need to do that by	Usually we do that by face-to-face conversation with the staff that have knowledge regard the	Yes, too many time that has happened by face to face interview.		The hospital management asked the staff about them opinion regard a situation they face it, that

	questionnaire or anything else?				survey or another way.	issue we face it.			happen by face-to-face meeting.
2.6. Communication	1. Was there a communication plan for TQM implementation ? Why? When? By whom	Yes, and that is by using internal system between the hospital departments. To reduce the waste of time.	The hospital improved an internal communication system to reduce the time waste and at the same time help to evaluate the progress level. The quality committee who is responsible about that.	Yes, which is help to evaluate the hospital progress and the performance improvement. This plan was developed by quality committee and AGS.	Yes, from the early step of TQM implementation, the hospital management consider a communication plan as an important factor to supervision for the hospital progress.	Yes, the hospital started to work on this plan from the beginning of TQM implementation, which is help to set as internal system connect the whole departments between each other and that's to help to evaluate the departments improvement.	Yes, and the quality committee who developed this plan and who is responsible about it as well. This plan help the quality committee to evaluate the staff and the departments' progress, and at the same time, help the whole hospital departments to be in touch with each other.	The board meeting in April 2014 set the hospital communication plan.	The communication plan was set from the early steps of the implementation processes, and this plan help the quality committee to evaluate the departments' progress and reduce the waste of time, which is happening in the normal way between the hospital departments.
	2. Was this plan implemented?	Yes	Yes	Yes	Yes	Yes	Yes		Yes
3. General Questions	1. Is there anything else that we have not discussed that you think helped TQM	No	No	No	No	No	No		No

	implementation ?								
	2. Is there anything else that we have not discussed that you think prevented TQM implementation ?	No	No	No	No	No	No		No
	3. How were these hindrances overcome?	No	No	No	No	No	No		No

Appendix 7: Summary of Second Interviews of Case Study (B)

Interview questions	Element of the theoretical framework	Interview responses B7	Interview responses B8	Interview responses B9	Interview responses B10	Interview responses B11	Interview responses B12	Documentary Evidence	Pattern Summary
Decision-making									
1.5. Taking Action	1. Was the TQM implementation decision supported by the senior management? How?	Yes, as the hospital management already was thinking about it and looking to improve the hospital performance. The first thing started with held a board meeting to discuss this decision.	Yes, as the hospital looking to improve the hospital performance.	Yes, as the hospital management was looking for this, as they believed it would help to improve the performance.	Yes, and the hospital discussed the implementation process in urgent Board meeting as they was looking for this.	Yes, the hospital held a board meeting to discuss the implementation process.	Yes and the first board meeting included the implementation plan and who is going to involve in.	Board meeting notes on late of December 2013	The TQM implementation was fully supported by the SM and from the early steps, as the hospital already thought about it before. The first Board meeting after this decision was to discuss the implementation process.
	2. What decisions have SM made regarding TQM implementation ? When were these decisions taken?	The hospital started with self-assessment and choose who is going to be involved in the implementation process.	Self-assessment was the first step and then choose who is going to be involved.	Self-assessment was the first step and that's was within the first two months.	First step was doing self-assessment to be aware where the hospital stand and that was within a few weeks.	Self-assessment was the first thing they did it, which was happened within the first two or three months.	The hospital board members through the board meetings decided to start with self-assessment and then looking for external help with the	More than three self-assessment reports, the first one was in January 2014, the second one was in November 2014, and the third one was in	First empirical step was doing a self-assessment for the whole hospital departments. In addition to asked for an external consultant help,

							implemenation process.	November 2015.	as interviewee B12 mentioned.
	3. Does the hospital management have the authority to take any actions related to implementing TQM? How?	Yes, full authority, only at the beginning the hospital was asking the GD as they were more expert with TQM than the hospital.	Yes, but only at the beginning we asked the GD about few issues seeking for advice not permission.	Yes, as the hospital make own decisions and do not need permission from anybody.	Yes, we have full authority to make any decision regarding the TQM or another issue.	Yes, sure, as a managers we do not need the GD approval to implement and decision.	I believe so, as in the last two years we did not back to the GD to ask for approval for any decision.	There are some formal letters in different times in 2013 & 2014 between the hospital and the GD asked about some issues regard the TQM implementation but the researcher just had a look for it and could not have a copy.	Since 2013, the GD authorised the hospital management fully authority to make them own decisions.
	4. How does the hospital prepare to take any action related to TQM implementation ?	At the beginning the hospital tried to do training programmes to the staff to let them be familiar with the TQM procedures and that's help them to have more confident in themselves regard TQM implementation	Training programmes at the beginning helped the staff and the hospital to move on in the implementation processes and then the regular meetings with staff to discuss the new issues need to make action about it.	Training programmes and study the situation in details to take the right action later.	Board meeting and training programmes in addition the regular meeting all of these helped the hospital to be sure regard any action need to do it.	By study the situation in details and asking the people who have more knowledge about it.	Going through the situation's details and asking the expert people regard it.		Asking the staff who in is direct contact with the issue, in addition to managed training programmes which is helped the staff to gain more knowledge regard the implementation process.

1.6. Monitor and Evaluate	1. Who is responsible for evaluating and monitoring TQM implementation ? How? Why?	The whole hospital staff responsible about this step, however, the departments' managers are responsible to evaluate the staff who working with.	The departments' managers responsible to evaluate the staff who working with, and the quality committee responsible to evaluate the whole hospital.	Each department's manager responsible to evaluate his team and the quality committee doing the evaluation for the whole hospital.	Quality committee who is responsible about that, but even the department's manager doing evaluation for the people who are working with.	Its shared responsibility between the departments' managers and the quality committee.	The departments manager doing the evaluation every single month and send it to the quality committee to evaluate the whole hospital.	Some of the monthly evaluation reports and the quality reports as well in different times between 2013 and 2015.	Each department manager responsible to evaluate his staff, and send the evaluation reports to the quality committee to evaluate the whole hospital.
	2. How does the hospital deal with any delays in making decisions? Why? Can you give an example of that?	Normally there is no delay in decision-making, however, if that's happen then the hospital management try to fix this quickly.	Check the reasons of this delay and hold a board meeting maybe to solve the problem.	There is no delayed happened yet in my period, so I do not know how this will be solve, but I think board meetings can help with this issue.	First, I will check the delay reasons, if it's within my authority then I will try to fix this.	The quality committee and the hospital manager can deal with it very easy as they have authority to solve any problem could the hospital face it.	I did not face problem like this before but if it has happened I will contact the quality committee manager to let him deal with it.		Normally there is no delayed happened, however, if that happen request an urgent board meeting can solve this issue.
TQM Implementation									
2.1. Senior Management	1. Has the senior management made a plan to implement TQM? If yes,	Yes, this plan was set up through a board meeting and then each department	Yes, each department's manager did meeting with the staff who working with	Yes, sure. First step was choose the staff who are going to involve and be responsible	This plan started from held each departments managers meeting with the staff who	Each department put a brief of the objectives they are looking for	The early steps of this plan was request for external consultant help, as the hospital		The whole of hospital department's managers hold a meeting with the employees

Commitment (SMC)	how? If no, why not?	manager explain this to the staff who working with.	and asked them about the departments objectives and what they are expect from the TQM implementation. Then all this has been discuss through a board meeting.	about the implementation, in addition tried to know which training programmes could help the staff in the implementation.	working with, and asked them about them opinion regarding the TQM.	and what is the timetable to reach these goals, this is helped later on the hospital management to make a plan with the external consultant help.	not expert with the implementation process at that time.		who are responsible about them, to ask about what they expect from the implementation of TQM and could involve in this. Interviewee B9 and B12 added decided which training programmes could the staff enrol to help them be more familiar with implementation processes.
	2. Which actions were taken to ensure that there is a commitment from the senior management? When were these actions taken? Who did this?	Quality committee responsible to ensure the SM keep commitment in the implementation of TQM by the progress report and direct supervision. Board members	As a quality committee manager, myself, and my team responsible to ensure the staff and SM keep them commitment in high level by direct supervision and	Direct supervision by the quality committee is the best action to ensure the SM keep commitment in TQM implementation. This action was decided from the early of the	Board meeting was occurred to explain more about the implementation benefits and processes, to let the board members be more understandable for TQM and that was within	Board meeting was hold to discuss the implementation n benefits and how the quality committee will be responsible about the hospital progress,	The hospital hold a board meeting within the first two months to discuss the implementation plan and decided who is going to involve in this in addition, doing a regular	Hospital board meeting on late of December 2013, which is contained asking the board members and the departments manager about them opinion regard TQM implementation, and they suggest	Quality committee playing a vital role in supervision operation, as they check the departments progress reports which is lead to keep high level of commitment from them to the

		discussed that on the early of the implementation steps.	check the progress report regularly.	implementation processes.	the first steps of TQM implementation as I remember within two months of the implementation decision.	which is mean playing supervisor role for the whole hospital. That has happened within the first two months of the implementation processes.	meeting to check the progress reports for the whole departments which is lead these departments to keep them commitment regard TQM implementation.	to use external consultant at the beginning to help in the implementation of TQM.	implementation processes, further doing regular meeting could help with that as well. That has happened within two months.
	3. What barriers impeded TQM implementation ?	At the beginning, the limitation of the staff knowledge was the main barrier as the TQM its new thing to the hospital, but at the current time, I do not think there is something could impede TQM implementation especially when we get ISO certificate last year.	When the hospital started implement TQM the main problem was the staff did not know anything about TQM, and how could let the staff gain knowledge about it and at the same time did not take long for that.	The limitation in the staff knowledge was the main obstacle for TQM implementation, as how could implement thing without any knowledge about it.	I remember on the hospital staff said “it’s will be impossible to implement TQM within the Iraqi situation”, as the government keep high level of centralisation and its will be the same with TQM.	Most of the hospital staff they did not believe that the hospital could implement TQM, because of the government managerial procedures, as they will not give to the hospital enough authority for that. Further, the staff did not know a lot or almost	I think the staff’s poor knowledge was the main barrier for TQM implementation.		The limitation in the staff knowledge for how to start implement TQM was the main obstacles at the beginning.

						anything about TQM.			
	4. How did the senior management avoid or negate these barriers?	By concentrate on training programmes and how to let the staff enrol in as much as possible to gain information about implementing TQM, and using external consultants were the best thing to start with in the implementation processes.	Training programmes was the main point to negate this barrier, but the problem was who can do this, as no one from the staff knows a lot about TQM. For that, the hospital makes a deal with external consultant to do that.	Let the staff know about TQM was the big problem as no one from the staff had a god experience regard TQM implementation, so the hospital decided to bring an external trainers to help with that.	At the beginning the hospital was worried about the centralisation policy for the government, and if the hospital have a big space of authority or not, and this worries was gone when the government inform the hospital they have authority to decided how to implement TQM.	Get assistance from external consultants was the best thing can the hospital do it, as the hospital staff have no experience how to implement TQM at that time.	External consultants were the solution for this barrier as TQM implementation new for them and they need some help to understand how it is going work.		The hospital have no idea how to implement TQM when the decision was made from the government, for that the hospital decided to used external consultants to help them with that. Interviewee B10 add the staff was worried about the centralisation policy for the government at the beginning but after that they realised the hospital management have authority to decided how to implement TQM.

	<p>5. Has the senior management communicated with the employees to minimise these barriers? If yes. How? If no. Why not?</p>	<p>Yes, but not with anyone from the staff, just with board members and department's manager as well, as that will not waste the time in addition they have more experience how to deal with different issues.</p>	<p>Board meeting was hold and another meeting for the department's managers as well to ask them about the best way to implement TQM, in addition external consultants was the suggestion to help with that.</p>	<p>Not at the beginning, as the staff already had a poor knowledge regard the implementation process.</p>	<p>Not applicable</p>	<p>The hospital did not have that much knowledge about the implementation processes at the beginning, so the hospital management left these to the external consultant to deal with it.</p>	<p>Yes, this is happening at the current time, but at the beginning, it is not applicable, as the staff still not familiar with TQM yet.</p>		<p>The hospital hold board meeting in addition meetings with the department managers asked them how to deal with these barriers, even if that's didn't happened at the early steps of the TQM implementation but still the top management consider the staff opinion.</p>
	<p>6. Has the senior management the authority to evaluate employees' performance? If yes. How? If no. Why not?</p>	<p>Yes sure. Each departments manager have authority to evaluate his staff as there is like a simple one happened every month and there is another one happening at the end of every year.</p>	<p>Yes. Department's manager doing that every month, further there is another one happening at the end of each year to evaluate the whole things in details.</p>	<p>The department's managers doing that for them staff, in addition, there is special department who is responsible to follow this in details which is called (performance</p>	<p>Yes, they have it, and they did it monthly in addition, there is annual one as well.</p>	<p>Yes, actually there is a monthly evaluation and annual one as well. The monthly one is a simple one and it is just going through few things, while the annual one</p>	<p>Yes of course and they did that with performance evaluation department help, as this department supply the managers with evaluation forms, which is back to the same department after</p>		<p>Yes, the senior management have authority to evaluate his staff and they did that monthly and at the end of each year within the performance evaluation department help.</p>

				evaluation department).		have more details.	the managers finish from it. In addition, there are two different of the evaluation forms a monthly one which is going through the thing briefly and annual one which is check everything in details.		
	7. Has the Governmental dept. granted the local hospital managers responsibility and authority? If yes. How? If no. Why not?	Yes, and that is within the rules of non-governmental organisations, which is already was decided by the government and consider to give more authority for these organisations.	Yes, as the government after war in 2003 started to minimise the interventions in the private sector procedures.	I can say yes, as until now the hospital did not back to the GD to have permission from them regard any issue.	Yes, as I cannot remember the hospital asked approval from the government regard any issue in TQM implementation.	I thinks so, I didn't heard anyone from the hospital management said we still wait approval from the government to implement x.	Yes and I think that has happened after the last war in 2003.		Until now the hospital managed the implementation process and did not asked permission from the government regard any issue.
	8. Does the hospital have the appropriate knowledge to implement TQM? How?	Of course not at the beginning and for that the hospital asked for AGS institution help.	When the decision was made to implement TQM the hospital knew	At the moment yes, but when the hospital start implement TQM not much and that is why	The managers had a few ideas about it at the beginning but they did not have a real	No, of course not when the decision was made to implement TQM unless	Yes, as most of the staff did many training about that, especially when the hospital		The staff did training about how to implement TQM and because of that,

			few things about it, for that asked for external consultants to do training for the staff.	the hospital used external consultant at the beginning.	training, for that, they asked AGS help at that time.	some of the managers did training but not in the hospital. In general, I can say no.	used external consultant for that.		they have the appropriate knowledge regard it.
	9. Have you ever refused to implement any decision before? Yes/No. Why?	Normally, the decision is taken by myself or within the board members help. But if the decision come from the government I think I can refuse it if it's not help to improve the hospital	No, I did not. Maybe because I did not see any decision could not help the hospital situation, or it is the wrong decision and supposed to be not implement it.	No because the hospital did not enforce us to do what we think, it will not help the hospital.	I remember at the beginning I refused the TQM implementation decision but then when I did more discussion about it with the staff I was happy to implement it.	No, because the decisions normally discussed by the board members and the hospital manager as will and I think they have more experience than I do.	No, not because I cannot do that, but because I believe in the hospital management ability to make the right decision.		The interviewees did not refused a decision because they know already the decision did not come by one person, as the hospital make the decision through a board meeting or at least within a rich knowledge about it.
	10. Were there clear objectives set for implementing TQM? Yes/No. Why?	Yes, because the hospital management was interesting in TQM implementation even before the GD decision, which is making them need to	In the light of the limitation of the hospital knowledge at the beginning yes it was clear and of course the hospital management did a polish for it	I think its clear enough for the staff especially within the limitation of the hospital management knowledge at the beginning of the	Yes, it is, as the hospital consider that will help the staff to know what are them role in the implementation procedures.	Yes, because that is will help the staff to know exactly what they have to do.	Yes, as that will help the staff to make the implemenataion more easier for them.		The implementation objectives was clear from the beginning even with the limitation of the hospital staff about the TQM as they believe

		implement it in the right way from the first steps.	later on when got more training.	implementation processes.					the clear objectives it's easy to follow and easy to implement as well.
	11. How is the progress of TQM implementation monitored? By whom?	By the quality committee and the board meetings at the same time.	The quality committee who is responsible about it in addition the board meeting check the progress report as well.	By the quality committee	By quality committee and the board meetings.	By the quality committee.	By the quality committee		Quality committee, board members and the departments managers are responsible about monitoring the TQM implementation.
2.2. Staff Involvement (SI)	1. Who was responsible for deciding how many people would be involved?	Hospital manager and board members.	The hospital manager and board members.	The hospital manager and board members.	Board members and hospital manager.	Hospital manager and board members.	Hospital manager and board members.		The hospital manager and board members who are responsible about that.
	2. Who chose the people to be involved?	The hospital manager.	The hospital manager and sometimes-asked quality committee to help him with that.	The hospital manager	The hospital manager	Hospital manager and could ask for the quality committee opinion as well.	Hospital manager	Board meeting on early of 2013, which is discuss who are going to involve in this.	The hospital manager who is responsible about that and sometimes could ask for the quality committee opinion as interviewee B7

									and B11 mentioned.
	<p>3. Have you had any experience of working in a group in the TQM implementation process?</p> <p>How did that go?</p> <p>What do you think about it? Do you think it works?</p> <p>Is there any difficulty with it?</p>	<p>Yes and it was helpful for me as I knew a lot of thing from it.</p> <p>No, there is no difficulty with it as the whole team was good. The interviewee adds to define what his mean by the team was good; that is mean the team was almost within the same level and they did not have any problem between each other.</p>	<p>Yes, sure and actually I keep working within team because this is my job as a manager.</p>	<p>Yes, I experimented this before and it was helpful.</p> <p>It was not include any difficulty and I think this is because the staff who was enrolls in.</p>	<p>Yes, I worked within team and it was helpful to understand many things.</p>	<p>Yes, and it was useful as I gained a lot of information about it, in addition its help me to know the staff much better.</p>	<p>Yes, and we are as quality committee keep working as a team and we did not face any problem with that.</p>		<p>The interviewees agreed that working within team was helpful for them and they did not mentioned to any problem about that. Interviewee B1 added, when the team within the same level its will be easier to understand each other.</p>
	<p>4. Was the use of teamwork considered?</p> <p>If yes. How and why? If no. Why not?</p>	<p>Yes and that help to improve the progress and avoid making mistakes.</p>	<p>Yes, as we cant implement TQM without working as team.</p>	<p>Yes, we believe that without working as team the hospital will not achieve any progress.</p>	<p>Yes, even if sometimes the hospital manager did not like the idea but we still keep it as a main method to reach the hospital</p>	<p>Yes because the hospital believes that using teamwork strategy is the more effective way to reduce the defect.</p>	<p>Yes especially when the hospital started implements TQM.</p>		<p>The hospital considered using teamwork strategy as the best way to reach the hospital goals. Interviewee A4 adds, in some</p>

					goals. The interviewee explained more about why the hospital manager did not like working within team in each case, as it sometimes make the employee inactive.				issues the hospital manager did not like to use teamwork, because that makes the staff inactive to do things in personal.
2.3. Training	1. Who is responsible for deciding which training programme you have to enrol with and why?	Board members through the board meetings.	Departments manager discusse which training programme they need it with the board memebbers who decided about it meanwhile the board meetings. Further, within the issues related to the TQM implemenation they ask to my opinion as well.	Board meetings	Departments' managers and the board members who are responsible about that.	Board members through the hospital board meetings, and sometimes they discuss this with the departments' managers.	Board members who make decision regard that through the board meetings. In addition, they could ask the quality committee as well.		Departments managers' discussion which training programme the staff need it with the board members to make decision about that through the board meetings. In cases related to the TQM implementation, they ask to the quality manager opinion.
	2. Have you made/ participated in a	No, because normally the board members	Yes, as a quality manager I am who is	Yes. As a board member and department	Yes, I participated in plan before,	Actually, I just suggest a programme	Yes, I did both of them, participated and		The interviewees participated in

	<p>plan for the training programme?</p> <p>If yes. How? If no. Why not?</p>	<p>who are responsible about that. However, I could amend the plan before we start in the implementation steps.</p>	<p>responsible about the training programmes related to TQM implementation. By discussion that with the departments' managers and what the staff need to be more effective in the implementation processes.</p>	<p>manager, I have responsibility to decide which training programme my staff need it.</p>	<p>because as a one of the board member, we have responsibility to decided which training programme the staff need it and that's happened by a discussion with the departments manager and the quality manager as well.</p>	<p>but participate in putting the plan for it I have never done that before.</p>	<p>made plan as well, because I work as a quality committee member and this is one of my responsibilities.</p>		<p>plan either suggest it or shape it, except interviewee B1 who said he could amend the plan before start in the implementation procedures because this is within his authority as a hospital manager.</p>
	<p>3. Was there a special training programme planned and implemented to support TQM implementation ?</p> <p>Why?</p> <p>When?</p> <p>By whom? To whom?</p>	<p>Yes, that has happened by the external consultant in the early steps of the implementation. To let the staff know what are the implementation processes and what them role in it.</p>	<p>Yes, that has happened within the first steps of the implementation procedures by the external consultant. This training let us know many things about TQM and what should the staff do for the next steps. In addition, there are some</p>	<p>The external consultant did a training programme for the hospital staff, each department and what his responsibility and how should improve his level.</p>	<p>The external consultant did training programmes at the beginning, as I remember within the first two months of made a contract with them (AGS).</p>	<p>The whole hospital staff enrolled in a training programmes which was happened by the external consultant when they coming to the hospital at 2013. In addition, as I think the first training I did it with them</p>	<p>Yes, the external consultant did the first training programmes, and then the quality committee did some workshops about that as well. The first training was within the first 3-4 months of the implementation processes.</p>		<p>The external consultant did training programmes for the whole hospital staff at the early steps of the implementation. Then the quality committee kept that by doing few workshops for the staff to let them be up to date with the implementation</p>

			workshops were done regard the same purpose.			was within 3 months of AGS beginning the work.			procedures. The first training was happened within the first of 3 months of the AGS coming to the hospital.
	4. Was any external consultant used? If yes, why? If no, why not?	Yes as I said before. Why, because the hospital at that time did not know many things about TQM and the external consultant was the best idea to help the hospital with that.	Yes, as I told you the first training was by external consultant and that was because the hospital has almost no idea how to start implement TQM.	The early steps of the implementation processes was by using external consultant, as the hospital did not had enough knowledge at that time about TQM.	Yes, as I said before, at the beginning the hospital management did not know how to start implement TQM as its new thing for them, so using someone who already expert in it its will be better.	Because the hospital did not have any experience in TQM so, they decided to use an external consultant to help them with that.	Yes, the first thing the hospital did it was used external consultant, as the hospital not expert yet with TQM.		The external consultant was the first thing the hospital was used it, as at the beginning of the implementation processes the hospital did not have enough knowledge how to implement TQM, and bring someone who already expert with it, was the best idea.
	5. Do you think you have appropriate training to make decisions? If yes. How? If no. Why not?	It is not training; I would to say expertise after too many years on this work.	I did some training before and it was a workshop in Basra university, in addition, I have few years'	No, I do not, but I have experience, which is come through a long many years working in deferent	No, I just use my own experince and I don't think there is a spiciall training for that.	No, I do not. Because nobody asked about that before, in addition, most of the managers used	No, and I believe nobody have.		There is no specific training about that in the hospital, and most of the interviewees didn't have training like that

			expertise as a manager.	positions in this field.		him or her expertise in this matter and no training required regard it.			except interviewee B8 who had a workshop in Basra university focused on decision-making
	<p>6. Have the managers had the previous training of TQM implementation ?</p> <p>If yes, what training have they received?</p> <p>When?</p> <p>If no, why not?</p>	Not before AGS came to the hospital and do some training to the staff.	No, they have not until AGS came to the hospital, but they were interesting and read a few things to know what TQM mean. As a quality committee manager I did some training with Basra university before the hospital start implement TQM.	Not applicable	Before AGS came to the hospital I do not think anyone from the staff did any training about it, and for that the hospital used AGS.	Training in formal way I do not think so. I believe nobody did training about something do not work on it.	No they don't, and that's was obvious when AGS started to do training to the staff most of the managers have no idea about it.		The hospital managers in different positions they did not have any training before AGS came to the hospital. Interviewee B2 he is the one who had training in Basra university about TQM what is the implementation processes.
	7. Does the hospital management have a special policy to manage	Yes, first will try to understand this result was because the trainer or the	Yes, we have policy like this, as we can change the trainer if he was the reason or	Yes, of course we have because it has cost the hospital money and we do it to improve	Yes, we have policy like that, as we already check our staff if they found the training was	I do not think so, as I didn't see someone really check if the training	Yes, it's supposed to be because training programmes cost the hospital money, but at		The interviewees said yes the hospital have policy like this, and they do

	unsatisfactory training results? How?	staff themselves, and then will deal with the situation. For example, if the trainer was the reason then we will change it.	give the staff kind of punishment because they did not care about the training as it cost the hospital money.	our staff not just waste for time. Each situation its different, as its maybe because the staff who had training or maybe because the trainers team.	helpful for them or not.	reaches the goals or not.	the same time I never heard there is something like that was happened.		work in it, but at the same time Interviewees B11 and B12 mentioned that it's not available in real life as nobody check if the training programmes achieve the goals or not.
	8. Have the managers had previous experience of TQM implementation ? Yes/No. If no, why not?	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable
2.4. Employee Empowerment (EE)	1. Who is responsible for empowering the employees to make a decision?	The departments' managers or the direct manager for the staff.	The hospital manager in addition every departments managers responsible to empower his staff.	The hospital manager and the departments managers as well.	Departments managers	Each department's managers responsible about empower his employees and the hospital manager responsible about the whole hospital.	Departments' managers.		Departments' managers or direct managers who are responsible to empower his staff.

	2. Does the senior management support the employees' decisions regarding TQM implementation ? If yes. How? If no. Why not?	<p>Yes, and that is by discuss the decision or the suggestion with the departments managers.</p> <p>This will improve the work procedures in addition give the employees more confident.</p>	Yes, as this will let the staff have more loyalty to the hospital, because the hospital management consider them opinion and support it, which is help also to improve the hospital performance.	Yes, but first the hospital manager will discuss it with the department manager or with the quality committee manager to check the implementation benefits.	Yes, even if sometimes this decision did not implement because the SM refuse it, but still there is a support for the staff opinion.	Yes, at least if the decision didn't be implement but still the SM consider this as a suggestion could improve the level of hospital performance.	SM try to support what the employees decided regard the implementation processes, and I said try because in some cases they refuse to implement it, as it is not that useful for the hospital.		SM support the employee's decision but not in general as in some case they refused to implement these decisions, in addition before implement anything the hospital manager should inform about it and discuss that with the department manager.
	3. Have the staff been empowered to make decisions regarding TQM implementation ? Yes/No. If yes how? If not. Why?	Yes, as I said in the previous question, the staff have empowerment to make decision regard TQM implementation but the one who is responsible and have fully authority about TQM is the	Yes, they empowered but it is not full authority, as still they have to ask the direct manager or the quality manager to implement a decision.	Yes, epically quality committee as they are who responsible about the implementation proses.	Yes, but the quality committee is the most one who was empowered about that. Because it is them responsibility at the end.	Yes, as the hospital management give the employees a big space to share in them opinion and in decision-making.	Yes, as I said before the SM support and empower the employees to make decision regards the TQM implementation. This empowerment will help the hospital to increase the staff confidence		SM give the staff a big space of empowerment, but that is did not mean they have to accept any decision they decided. The most departments have empowered to make decision regard TQM

		quality committee.					in themselves and in the hospital at the same time.		implementation is the quality committee.
	4. Do the employees accept the empowerment? How? Why?	Yes, most of them accept it.	Yes, because they like to be as a part of the implementation processes.	Yes, because they want to have them role in this implementation, in addition they already know the top management will support them.	Yes, they do not mind that at all, as they like to have them role in the implementation processes.	Yes, I think they enjoy having empowerment and ability to make a decision.	I think so, as I did not hear one of the staff refused that or even did not like the idea.		The employees enjoy to be empowering, as that will let them participate in decision-making and they can have them role in the implementation processes.
2.5. Continual Improvement (CI)	1. Who was responsible for choosing which methods would be implemented? Why was this method chosen? What do you think about it?	The hospital manager and board members as well, as it its sharing decision between them. They choose a method that is fit to the work conditions and to the patient's benefits at the same time.	Board members through the hospital board meetings. They will choose depend on them expertise in addition, which information they have or any feedback could help to make a decision regard the issue they face it.	The hospital board members through board meetings. It is the best way for that, as the decision will be sharing between the board members.	Borad members with the hsopital manager. Nobody complain about this method as the decision not belong for specific department and exclude the others, which is mean dealing with the situation in professionalisim	It is sharing decision between the board members, who make decision regard any issue they face it through the hospital board meetings. I think it is quite good as the decision belongs for more than one person and the	The board members who are responsible about that and they decided through a board meeting, depend on information they already have, or them expert, at least this is what the staff think about it. I think it is appropriate especially it is	Board meeting notes include discussion about that in Feb 2014.	Hospital manager and board members who are responsible about choosing which method is best to implement. This method encourages teamwork spirit in addition; error percentage will be in the minimum level, because more than one person

						error percentage will be in the minimum level.	encourage to teamwork spirit between the staff.		made the decision.
	2. Have you had training in this method? Yes/No. Why?	Yes, AGS did training regard that. Because the staff did not have idea about that before.	Yes, and that was by AGS in addition, I did one in Basra university. That was because it is something new to us and we did not have enough knowledge about it.	Yes, and that was when the hospital start implementing TQM, as it's something new to the hospital and need to gain knowledge about it.	Yes, I had. Because I did not have how this will be implement at that time, so I need to gain knowledge as much as I can to do the things in the right way.	Yes, as a quality member I need to be familiar with any procedure related to TQM implementation.	Yes, and I think the whole staff did. This is because we need to know how the implementation will implement, in addition, how the improvement will happened.		The hospital staff had training regard that, which was at the beginning of the implementation steps, because the staff still not familiar with the implementation of TQM at that time, in addition, they need to know how the improvement strategy of this implementation will happened.
	3. Has anyone explained to the staff about the method type and what the point of it is? Yes,/ No. why?	In general, the explanation happened to the departments managers, and in specific cases could explain that to the	Not for the whole staff, just for the departments managers, and in a few cases could explain	It is supposed to be the whole staff understood why this method was chosen, but in the reality, just the departments'	The board members explain that to the departments' managers, and supposed from those mangers explain that to	Normally, the board members explain just to the departments' managers and the	As I know, just the departments managers who were informed about that from the board members. However, the		The departments managers were normally informed about that by the board members, while the rest of staff is depends

		employees overall.	that for almost the whole staff.	managers know about it.	the staff, but they did not do that in fact.	departments' manager they are free to explain that to the people they are working with or not.	rest of the staff just in a few cases they may know about it.		to them manger if are going to inform them about the method or not. Most of the time the staff did not know why was this method was chosen.
	4. Has anyone asked you about your opinion on the method they want to implement? By survey, questionnaire or anything else?	Yes, sure, as I am one of the board members. That has happened by discussion face to face.	Yes, and that has happened by face-to-face discussion most of the time.	Face to face, discussion is the popular one to ask someone about his opinion regard specific issue.	If there is something, need to the staff opinion, se we do that by contact them directly no need to do that by survey or another way.	Usually we do that by face-to-face conversation with the staff that have knowledge regard the issue we face it.	Yes, too many times that has happened by face-to-face interview.		The hospital management asked the staff about them opinion regard a situation they face it, that happen by face-to-face meeting.
2.6. Communication	1. Was there a communication plan for TQM implementation ? Why? When? By whom	Yes, and that is by using internal system between the hospital departments. To reduce the waste of time.	The hospital improved an internal communication system to reduce the time waste and at the same time help to evaluate the progress level. The quality committee who	Yes, which is help to evaluate the hospital progress and the performance improvement. This plan was developed by quality committee and AGS.	Yes, from the early step of TQM implementation, the hospital management consider a communication plan as an important factor to supervision for the hospital progress.	Yes, the hospital started to work on this plan from the beginning of TQM implementation, which is help to set as internal system connect the	Yes and the quality committee who developed this plan and who is responsible about it as well. This plan help the quality committee to evaluate the staff and the departments'	The board meeting in April 2014 set the hospital communication plan.	The communication plan was set from the early steps of the implementation processes, and this plan help the quality committee to evaluate the departments' progress and

			is responsible about that.			whole departments between each other and that's to help to evaluate the departments improvement.	progress, and at the same time, help the whole hospital departments to be in touch with each other.		reduce the waste of time, which is happening in the normal way between the hospital departments.
	2. Was this plan implemented?	Yes	Yes	Yes	Yes	Yes	Yes		Yes

Appendix 8: TQM Factors

Factors	Authors	Number of Articles
Senior Management Commitment (SMC)	Adeoti (2011), Ahmad and Elhuni (2014), Brown <i>et al.</i> (2008), Saraph <i>et al.</i> (1989), Hietschold <i>et al.</i> (2014), Tamimi (1998), Arumugam <i>et al.</i> (2009a), Anderson <i>et al.</i> (1994), Flynn <i>et al.</i> (1994), Ahire <i>et al.</i> (1996), Rao <i>et al.</i> (1999), Bayraktar <i>et al.</i> (2008), Lakhe and Mohanty (1995), Latif (2014), (Prajogo and Sohal, (2004), Prajogo and Sohal,(2006), Dean and Bowen, (1994), Mittal <i>et al.</i> (2011), Mosadeghrad (2014c), Arsić <i>et al.</i> , (2012), Sabet <i>et al.</i> , (2012), Talib <i>et al.</i> , (2011), Murgatroyd and Morgan (1993), Hodgetts <i>et al.</i> (1999), Motwani (2001), Sit <i>et al.</i> (2009), Sila and Ebrahimpour (2003), Mensah <i>et al.</i> (2012), Singh (2011), Khanna <i>et al.</i> (2011), Dayton (2001), Fotopoulos and Psomas, (2009), Abdullah, Uli, and Tari' (2008), Suwandej (2015), Al-Shdaifat (2015), Topalović (2015), Cetindere <i>et al.</i> (2015), Montes <i>et al.</i> (2003), Yusof and Aspinwall (1999), Pimentel and Major (2016), Park <i>et al.</i> (2012), Yang (1997),	48
Staff Involvement and Teamwork	Adeoti (2011), Yang (1997), Antony <i>et al.</i> (2002), Arumugam <i>et al.</i> (2011), Black and Porter (1996), Arsić <i>et al.</i> (2012), Boon <i>et al.</i> (2007), Eskildsen <i>et al.</i> (2004a), Evans and Lindsay (2007), Flynn <i>et al.</i> (1994), Ahire <i>et al.</i> (1996), Bayraktar <i>et al.</i> (2008), Latif (2014), Martensen and Gronholdt (2001), Guerra <i>et al.</i> (2015), Mellahi and Eyuboglu (2001), Mittal <i>et al.</i> (2011), Chang <i>et al.</i> (2010), Sabet <i>et al.</i> (2012), Dayton (2003), Motwani (2001), Mann and Kehoe (1995), Oakland (2003), Sila and Ebrahimpour (2003), Mensah <i>et al.</i> (2012), Singh (2011), Forza, (1996), Fotopoulos and Psomas, (2009), Parumasur and Govender (2013), Prajogo and Cooper (2010), Abdullah <i>et al.</i> (2008), Suwandej (2015), Al-Shdaifat (2015), Yusof and Aspinwall (1999), Park <i>et al.</i> (2012), Thiagarajan and Zairi (1997), Hietschold <i>et al.</i> (2014), Sadikoglu and Zehir (2010), Xyrichis and Ream (2008), Jun <i>et al.</i> (2006), Zeng <i>et al.</i> (2015)	41
Training	Ahmad and Elhuni (2014), Saraph <i>et al.</i> (1989), Tamimi (1998), Arsić <i>et al.</i> (2012), Anderson <i>et al.</i> (1994), Ahire <i>et al.</i> (1996), Rao <i>et al.</i> (1999), Joseph <i>et al.</i> (1998), Bayraktar <i>et al.</i> (2008), Latif (2014), Mellahi and Eyuboglu (2001), Mittal <i>et al.</i> (2011), Mosadeghrad (2014), Terzic-Supic <i>et al.</i> (2015), Yang (2003), Thomes (1992), Lim <i>et al.</i> , (2007), Velada <i>et al.</i> (2007), Noe <i>et al.</i> (2006), Chow <i>et al.</i> (2008), Elmishri (2000), McCracken <i>et al.</i> (2012), Terzic-Supic <i>et al.</i> (2015), Gremyr and Elg (2014), Xyrichis A, Ream E (2008), Hodgetts <i>et al.</i> (1999), Motwani (2001), Talib <i>et al.</i> (2011), Sila and Ebrahimpour (2003), Singh (2011), Khanna <i>et al.</i> (2011), Dayton (2001), Suwandej (2015), Al-Shdaifat (2015), Cetindere <i>et al.</i> (2015), Yusof and Aspinwall (1999), Park <i>et al.</i> (2012), Adeoti (2011), Thiagarajan and Zairi (1997),	39
Employee Empowerment (EE)	Adeoti (2011), Yang (1997), Arsić <i>et al.</i> (2012), Anderson <i>et al.</i> (1994), Ahire <i>et al.</i> (1996), Antony <i>et al.</i> (2002), Claus (1991), Ehigie and Akpan (2004), Emmert and Taher (2002), Eskildsen <i>et al.</i> (2004), Hietschold <i>et al.</i> (2014) Lakhe and Mohanty (1995), Latif (2014), Mosadeghrad (2014), (Mosadeghrad, 2013), Martensen and Gronholdt, (2001), Mohanty and Lakhe (1998), Mittal <i>et al.</i> (2011), Hamidi and	36

	Zamanparvar (2008), Kumar <i>et al.</i> (2011), Mann and Kehoe (1995), Murgatroyd and Morgan (1993), Hodgetts <i>et al.</i> (1999), Mann and Kehoe (1995), Sila and Ebrahimpour (2003), Mensah <i>et al.</i> (2012), Singh (2011), Dayton (2001), Prajogo and Sohal (2006), Fotopoulos and Psomas, (2009), Pimentel and Major (2016), Boon <i>et al.</i> (2007), Emamgholizadeh <i>et al.</i> (2011), Jamali <i>et al.</i> (2010), Slack <i>et al.</i> , (2004),	
Continuous Improvement (CI)	Adeoti, (2011), Arshida and Agil (2013), Brown <i>et al.</i> (2008), Yang (2003), Mittal <i>et al.</i> (2011), Chow-Chua and Goh (2000), Claus (1991), Hietschold <i>et al.</i> (2014), Talib <i>et al.</i> (2011), Kumar <i>et al.</i> (2011), Mun and Ghani (2013), Mohanty and Lakhe (1998), Musenze <i>et al.</i> , (2014), Nawelwa <i>et al.</i> (2015), Goldratt (1988), Dayton (2001), Sila and Ebrahimpour (2003), Singh (2011), Prajogo and Sohal (2006), Parumasur and Govender (2013), Taylor and Wright (2003), Sohal and Terziovski (2000), Terziovski and Samson, (1999), Flynn <i>et al.</i> (1994), Fotopoulos and Psomas (2009), Abdullah <i>et al.</i> (2008), Al-Shdaifat (2015), Terzic-Supic <i>et al.</i> (2015), Cetindere <i>et al.</i> (2015), Park <i>et al.</i> (2012), Chang (2005), Guerra <i>et al.</i> (2015), Sadikoglu and Zehir (2010), Zeng <i>et al.</i> (2015),	35
Communication	Ahmad and Elhuni (2014), Antony <i>et al.</i> (2002), Black and Porter (1996), Baig <i>et al.</i> (2015) Joseph <i>et al.</i> (1998), Mittal <i>et al.</i> (2011), Mosadeghrad (2014), Jianu <i>et al.</i> , (2013), Johansson (2007), Faisal (2010), Oakland (2003), Singh (2011), Berger (2008), Greenberg and Baron (2010), Nazer <i>et al.</i> (2011), Mueller and Lee (2002), Harris and Nelson, (2008), Goldratt, (1988), Lewis, (2006), Berger, (2008), Cheney, (2011), Kluse (2009), Musenze <i>et al.</i> , (2013), Jenkins <i>et al.</i> (2011), Fotopoulos and Psomas (2009), Suwandej (2015), Al-Shdaifat (2015), Pimentel and Major (2016), Park <i>et al.</i> (2012), Adeoti (2011), Thiagarajan and Zairi (1997), Dayton (2001), Firlar (2010), Samuelsson and Nilsson (2002), Mahmoud <i>et al.</i> (2014),	35

Customer Focus	Abusa and Gibson (2013a), Adeoti (2011), Yang (1997), Antony <i>et al.</i> (2002), Black and Porter (1996), Arumugam <i>et al.</i> (2009a), Anderson <i>et al.</i> (1994), Ahire <i>et al.</i> (1996), Bayraktar <i>et al.</i> (2008), Dayton (2001), Evans and Lindsay (1999), Hoang, Igel and Laosirihongthong (2006), Mittal <i>et al.</i> (2011), Hodgetts <i>et al.</i> (1999), Sit <i>et al.</i> (2009), Talib <i>et al.</i> , (2011), Mensah <i>et al.</i> (2012), Khanna <i>et al.</i> (2011), Al-Shdaifat (2015), Cetindere <i>et al.</i> (2015),	21
Organisation culture	Al-Bourini <i>et al.</i> , (2013), Black and Porter (1996), Kaluarachchi (2010), Green (2012), Baird <i>et al.</i> (2011), Jancikova and Brychta (2009), Talib <i>et al.</i> (2011), Al-Swidi and Mahmood (2012), Hamidi and Zamanparvar (2008), Gimenez-Espin <i>et al.</i> (2013), Mosadeghrad (2014b), Roldán <i>et al.</i> (2012),	14
Supplier quality management	Saraph <i>et al.</i> (1989), Arumugam <i>et al.</i> (2009a), Flynn <i>et al.</i> (1994), Black and Porter (1996), Ahire <i>et al.</i> (1996), Rao <i>et al.</i> (1999), Motwani (2001), Sila and Ebrahimpour (2003), Khanna <i>et al.</i> (2011), Dayton (2001), Montes <i>et al.</i> (2003), Yusof and Aspinwall (1999),	12
Human resources management	Tamimi (1998), Joseph <i>et al.</i> (1998), Lakhe and Mohanty (1995), Wilkinson <i>et al.</i> , (1998), Mellahi and Eyuboglu (2001), Mosadeghrad (2014), Sit <i>et al.</i> (2009), Talib <i>et al.</i> , (2011), Sila and Ebrahimpour (2003), Montes <i>et al.</i> (2003), Yusof and Aspinwall (1999),	11
Product design	Saraph <i>et al.</i> (1989), Flynn <i>et al.</i> (1994), Ahire <i>et al.</i> (1996), Rao <i>et al.</i> (1999), Joseph <i>et al.</i> (1998), Bayraktar <i>et al.</i> (2008), Lakhe and Mohanty	11

	(1995), Sila and Ebrahimpour (2003), Singh (2011), Khanna <i>et al.</i> (2011), Dayton (2001),	
Job satisfaction	Adinolfi, (2003), Brashier <i>et al.</i> , (1996), Dahlgaard-Park, (2011), Duh <i>et al.</i> , (2012), Talib <i>et al.</i> , (2011), Ooi <i>et al.</i> , (2008), Turkyilmaz <i>et al.</i> , (2011), Pantouvakis and Bouranta (2013), Motwani (2001), Park <i>et al.</i> (2012),	10
Process management	Arumugam <i>et al.</i> (2009a), Flynn <i>et al.</i> (1994), Teh (2009), Mann and Kehoe (1995), Singh (2011), Khanna <i>et al.</i> (2011), Dayton (2001), Montes <i>et al.</i> (2003),	8
Strategic planning	Arumugam <i>et al.</i> (2009a), Rao <i>et al.</i> (1999), Latif (2014), Saravanan R. (2007), Mosadeghrad (2014), Dayton (2003), Sit <i>et al.</i> (2009),	7
Quality information	Flynn <i>et al.</i> (1994), Black and Porter (1996), Rao <i>et al.</i> (1999), Joseph <i>et al.</i> (1998), Sit <i>et al.</i> (2009), Khanna <i>et al.</i> (2011), Dayton (2001),	7
Bureaucracy	Bovaird and Löffler (2003), Mosadeghrad (2013, 2014b), Zabada <i>et al.</i> (1998), Vinni (2007),	5
Role of Quality department	Joseph <i>et al.</i> (1998), Saraph <i>et al.</i> (1989), Khanna <i>et al.</i> (2011), Dayton (2001),	4
Rewards and recognition	Kohlbacher and Markus, (2010), Sabet <i>et al.</i> , (2012), Suwandej (2015)	3
Quality management	Ahire <i>et al.</i> (1996), Bayraktar <i>et al.</i> (2008), Dayton (2003),	3
Technology utilisation	Tamimi (1998), Joseph <i>et al.</i> (1998),	3
Service quality	Mellahi and Eyuboglu (2001), Singh (2011),	2
Employee relation	Ahmad and Elhuni (2014), Saraph <i>et al.</i> (1989),	2
Economic factors	Adeoti (2011), Lakhe and Mohanty (1995),	2
Customer orientation	Rao <i>et al.</i> (1999), Lakhe and Mohanty (1995),	2
Job evaluation	Arsić <i>et al.</i> (2012), Suwandej (2015)	2
Environmental factors	Adeoti, (2011), Black and Porter (1996),	2
Employee compensation	Arsić <i>et al.</i> (2012),	1
Corporate quality Culture	Black and Porter (1996),	1
Employee loyalty	Arsić <i>et al.</i> (2012),	1
Operating procedures	Tamimi (1998),	1
Courtesy	Topalović (2015),	1
Responsibility	Topalović (2015),	1
Employee performance	Chang (2005),	1