MEASURING SOCIAL VALUE IN CONSTRUCTION

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Within the UK construction industry Social Value (SV) is a public sector procurement criterion of such importance that how a contractor engages with SV could ultimately be the difference between procurement success and failure. Contactors are increasingly expected to measure and communicate their SV. Therefore, they must do so in a way that is understood by numerous clients simultaneously or must measure and communicate SV numerous different ways for each of the clients they work with. This is due to clients and contractors arguably having unique SV interpretations, and so reaching an agreed definition is often problematic. It can be said that a conflict exists at the heart of SV between the subjective nature of SV and the objective way SV is expected to be measured and communicated. Popular SV measurement tools attempt to circumvent these problems by reducing SV to monetary metrics. Although these arguably miss the wider, nuanced and more difficult to measure aspects of SV. The aim of this paper is to explore how the wider and nuanced aspects not captured in financial metrics can be measured and communicated in a way that is understood by multiple stakeholders simultaneously. After a review of existing SV measurement tools interviews and questionnaires are conducted with construction contractors, public sector clients and the recipients of SV practices. A SV measurement tool is then developed that addresses the subjective nature of SV in an attempt to reconcile the conflict at the heart of the heart of the concept. The research findings reveal the tool measures and communicates the subjective nature of SV in a way that is simultaneously understood by diverse stakeholders.

Keywords: Social Value Act, legitimacy theory, procurement, CSR, measurement.

INTRODUCTION

The construction industry has historically been associated with heavy environmental exploitation and an aggressive attitude towards both clients and society (Barthorpe, 2010). It is argued that construction has more reason than most to adopt and embrace Corporate Social Responsibility (CSR) (Murray and Dainty, 2009). Whilst the industry in places has started to embrace CSR, the focus of effort has increasingly concentrated on environmental aspects over social (Loosemore *et al.*, 2018). Arguably this is largely due to both the ease at which environmental criterion can be measured compared to social criterion and the importance that has been placed upon environmental factors in wider society. However, there is now a growing importance being placed upon measuring and communicating social value in the UK construction industry (Raiden *et al.*, 2019). Despite this increasing importance reaching widely agreed definitions are difficult due to the concepts' subjective and ambiguous nature as SV ultimately comes to mean different things to different people (Watts *et al.*,

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2018). Yet simultaneously there is an objective need for contractors to measure their social value practices and communicate any results in an understandable manner in order to experience the procurement benefits available. To help meet this measurement and communication need there are a wealth of competing social value measurement tools available. However, these are largely reductionist, assigning a monetary figure to the social value created. Whilst this approach has benefits, criticisms include the factors lost when complex SV practices are simplified to monetary metrics, leading to calls for a more qualitative approach (Watson *et al.*, 2016). This paper addresses such calls and develops a SV measurement tool that measures the wider and more nuanced aspects of SV communicating them in a way that can be understood by numerous stakeholders simultaneously. The tool addresses the tensions created by the objective need to measure and communicate the subjective concept of SV offering a workable solution for the industry in measuring SV with non-financial metrics.

Defining CSR and Social Value

CSR is inherently a subjective concept as it means different things to different people (Watts et al., 2018). An advantage to such subjectivity is that each stakeholder can arrive at their own interpretation (Griffith, 2011). However, this has resulted in the lack of a widely agreed definition (Blowfield and Murray, 2011) with growing interest in the concept serving only to increase the variety of definitions proposed (Carroll, 2015). There are arguably two distinct approaches. The first, one of flexibility, allowing stakeholders to embrace whichever unique definition best suits their individual needs (van Marrewijk, 2003). The second considers CSR as a broad concept relevant to wider constituencies, which allows numerous themes and shared interpretations to exist (Barthorpe, 2010). Such approaches have resulted in definitions that complement, overlap and differ from one another, serving to further exaggerate attempts to reach an agreed CSR understanding between different parties (Zhao et al., 2012). Confusions are also perpetuated by the different importance and weighting given to each constituent part of CSR by individual stakeholders. Therefore, the subjective nature of CSR and SV also arguably serve to restrict the development of the concepts and make it increasingly difficult for one party to clearly communicate with another.

Whilst construction contractors have always had an awareness of the social aspects of CSR (Barthorpe, 2010) it was the introduction of the SVA that arguably brought the idea of SV into mainstream business consciousness (Watson et al., 2016). However, as the term SV is subject to the same arguments as CSR with regards to its subjectivity (Loosemore and Higgon, 2016) it has been argued that SV refers to an actionable concept and something that will contribute to both immediate stakeholders and wider society in general (Kuratko et al., 2017; Watson et al., 2016). It is also argued that the emphasis should be placed on how the generated social value extends above and beyond the actual value of the goods and services that are the result of a transaction (Agrawal et al., 2015). However, the specific concept of social value is still in its infancy, with widespread and long-term examples of success stories hard to find (Loosemore, 2016). Nevertheless, examples have been provided from a government review that include a social enterprise hiring homeless people, a local taxi business employing apprentices and a multinational organisation raising money for a charity partner (Cabinet Office, 2014). The review also highlights the barriers that the process of embedding social value in UK business is currently facing, which include a lack of intent from those procuring public sector works and a lack of consistent

understanding and agreement as to what social value actually is (Cabinet Office, 2014). This lack of social value consensus is arguably a downside to the concept's subjective nature in which multiple interpretations are encouraged. However, despite this subjective nature, since the introduction of the SVA, there is a greater focus on and need for SV practices to be clearly measured and communicated to increase chances of construction procurement success.

Procurement in the UK Construction Industry

Procurement in the UK construction industry has traditionally revolved around the triumvirate of time, cost and quality, with the contractor who best fulfils these factors the one most likely to be successful (Wong *et al.*, 2012). However, the addition of CSR factors as procurement criterion is slowly increasing throughout construction procurement and has been argued to stem from the beginning of the twentieth century (Hoejmose and Adrien-Kirby, 2012). It is the public sector which can be credited with driving the increasing focus on CSR and SV, with procurement described as both the ideal vehicle to introduce additional performance metrics (Uttam and Le Lan Roos, 2015) and a perfect mechanism through which public clients can achieve their CSR agendas and policy change (Correia *et al.*, 2013).

The weighting of CSR criterion in procurement is argued to be around 10% (Varnas et al., 2009; Uttam and Le Lan Roos, 2015). Therefore, how effectively a contractor embraces CSR could ultimately be the difference between procurement success or failure (Loosemore, 2016). It is arguably not imperative that SV is measured by contractors, but those who do are in a greater position to be successful in any procurement that includes SV criterion, such as public sector work. Questions may then be asked as to why contractors would choose to work for the public sector if additional requirements are expected, such as the need to measure and communicate SV. Especially as government statistics show that the public sector only accounts for around 26% of the UK construction output, with the private sector contributing around 74% each year (Rhodes, 2015). However, the same government report shows that in times of economic uncertainty where private sector construction workload can reduce significantly, public sector workload can remain fairly buoyant (Rhodes, 2015). The increasing use of social factors has arguably been given more legitimacy in the construction industry by the introduction of the Public Services (Social Value) Act (2012). The Social Value Act (SVA) places a legal duty on public bodies to consider how the procurement choices they make can lead to additional social value, instead of simply awarding projects based on the lowest immediate cost (Loosemore, 2016). Contractors are therefore required to both measure and communicate their social value to public sector clients during procurement (Loosemore and Higgon, 2016) to allow clients to make informed procurement decisions. However, with no widely agreed definition of social value and with multiple stakeholders each holding somewhat unique interpretations, clear measurement and communication is proving to be difficult (Loosemore and Higgon, 2016).

Social value has objective requirements in that it has to be measured, communicated and understood during procurement (Loosemore and Higgon, 2016). This contributes to the tension at the heart of the concept where interpretations don't align. This tension arguably manifests itself in unsuccessful procurement attempts and leads to inconsistent measurement practices and a lack of rigour around how outcomes are quantified and compared (Cabinet Office, 2014). Therefore, to improve chances of

procurement success there is a real need for robust measurement of SV in a way that embraces the subjectivity of the concept whilst meeting the concepts objective needs.

Measuring Social Value

There was a growing need to measure social value before the introduction of the SVA (Blowfield and Murray, 2011). However, the SVA placed a legal duty upon public bodies to assess and compare the social value contractors offered, resulting in an increased contractor focus on the measurement and communication of SV (Watson et al., 2016). For the environmental aspects of CSR, measurements have taken the form of the total reduction in carbon emissions or the total number of trees planted, and basic SV measurement has included practices such as counting the total number of apprentice positions created (Agol et al., 2014; Mirza-Davies, 2016). Where SV measurement approaches have attempted to be more detailed, leading tools such as Social Return on Investment (SROI) have been proposed (Bridgeman et al., 2015). Social Value Portal and Local Multiplier 3 are also popular measurement tools, and despite all reducing SV to a monetary metric, there is still little consistency in the approaches taken and calculations used. It is argued that all measurement tools lack a comparable output (Gjolberg, 2009) largely due to the ambiguity that surrounds CSR and SV concepts (Korhonen, 2003). Therefore, it is arguably of no surprise that a widely agreed method of CSR measurement is yet to be produced (Venturelli et al., 2017). Despite the issues encountered in the measurement of CSR, attempts have still been made to measure SV. However, such attempts have been fraught with similar difficulties again largely due to the subjectivity of the concept and differing interpretations that exist amongst stakeholders (Loosemore, 2016). This has resulted in no single measurement method being widely adopted.

However, those methods that do utilise financial metrics can arguably advertise benefits such as universal understanding of communications and also wide application and comparison capabilities (Watson et al., 2016). A summary of leading SV measurement tools can be seen in table 1. Reductionist and objective methods of assigning monetary amounts to social value have been criticised for expressing complex social issues in simplistic monetary terms, potentially undervaluing the true extent of the benefits realised and leaving calls for a more qualitative tool unanswered (Watson et al., 2016). Criticisms of using quantitative monetary metrics to measure largely qualitative phenomena also include the argument that wider social value does not lend itself to be easily measured and that difficult to measure social and ecological factors can be missed (Korhonen, 2003). Other criticisms include the nuanced positive impacts created by providing things such as a pleasant home life, an improvement of community spirit, and helping people gain secure employment can often be overlooked, and as quantitative monetary outputs can be compared, it can lead people to believe SV practices can be easily interchanged if the same end value is achieved (Korhonen, 2003). The problem therefore exists that by adopting nonfinancial metrics to measure social value, any social value measurement tool could potentially alienate stakeholders who do not share that interpretation of what social value means. However, as table 1 reveals, the majority of leading SV measurement tools all utilise monetary metrics and the majority of accompanying literature also has the same focus. Therefore, a gap in current research and practice exists of how to measure SV with non-financial metrics that can appease multiple stakeholders who each have a unique and subjective interpretation.

Title	Cost	Description	Advantages	Disadvantages	Comment
GIIRS	\$4,000 per annum	A tool designed to assist investors in understanding the impact the organisations they invest in have upon numerous stakeholders	Analyses an orgs impact on workers, customers, community and the environment Allows results to be recorded, measured and viewed in graph form Provides an easy to understand medal/star rating	tions have measuring n of fund ations may	A tool designed for investors measuring the impact of the organisations they fund. Assigns a score and not a monetary metric. Not suitable for WD use
Global Reporting Initiative (GRP)	Free and subscription	Helps organisations understand and communicate their • Extensively used impact upon society and the environment by introducing • Focusses upon clear communication expected reported standards.		Doesn't focus on impact measurement The metrics are numerous and broad and so can be difficult to compare	Focused upon how sustainability is communicated and not necessarily measured therefore offers guidance on areas to measure but not on how to measure them
Human Impact and Profit Scorecard (HIP)	Starts from \$500 per month	A tool for investors to identify the positive human impacts that arise from investments. Used quantitative measures of performance which are assigned by HIP.	Results in a graph to compare investments Analyses individual companies and assigns a score across 5 areas Ceffers wildation as an independent third party.	Focusses upon organisations and not individuals The 'score' is a number / percentage which can be hard to understand	Measures across health, wealth, earth, equality and trust. But is focussed on how organisations behave and not how individuals are impacted
IRIS	Free and subscription	A framework of guidance and metrics which allows investors to track social and environmental 'outputs' of their investments as well as the financial returns	Uses existing standardised metrics Allows the user to select the metrics used	Only really measures 'outputs' All outputs are in different formats	As outputs are measured the tool doesn't consider identifying and measuring the impacts which are required
LM3	£4,000 first year. £2,000 annually thereafter	A tool that helps organisations calculate the financial impact their spending has on local economies and how this spending then circulates within the economy	Easy to use Increasingly well known Easy to express impact	Reduces impacts to monetary metrics Doesn't measure the 'deeper' impacts	A good tool for financial measurement of spending but fails to understand the deeper and more nuanced none-financial impacts organisational actions can have on individuals.
ONS Wellbeing Survey	Free for information. No tool to use so will require WD development costs	A Government recognised and backed survey that identifies and measures societal and personal wellbeing across several categories including life satisfaction, happiness and anxiety	Measure impact upon individuals Allows long term trends to be identified Results in easy to read graphs	Survey is too detailed to deploy and assess regularly No 'tool' to use - information only Time consuming to complete	Highly relevant. Messures impact of individuals. Produces an easy to read graph. Can be used for WD purposes but requires amendments to make more suitable for widespread use.
Social Impact Assessment (SIA)	Free	A method of identifying and assessing any social concerns (including areas for positive enhancement and reducing negative impacts).	Used proactively before a project commences. Impacts can be selected to suit project needs.	Only offers guidance on identification and not measurement	A good framework to adopt to identify what areas can be impacted during projects but not suitable to provide detailed measurement assistance of how gractices impact individuals.
Social Return on Investment (SROI)	Free and subscription. Cost of training and additional staff time	A framework method of quantifying and measuring environmental and social value, it results in a financial figure of social value created and a ratio of how this compares to every £1 spent.	Wudely recognised Results in easy to understand metrics and graph The control stakeholder involvement Takes into account the original investment	Results are financial Monetises all impacts - even if they are not easily monetised Very resource intensive Can overlook and fail to identify impacts on individuals	A good comprehensive tool. It considers investment and provides an easy to understand ratio and graph. The financial outputs risk ignoring desper impacts and broad metrics can overlook impacts on individuals.
Social Value Portal (SVP)	Social Value Portal Membership level subscriptions	An online tool that allows organisations to measure their added social value. Uses and results in both financial and individuals non-financial data. Assigns KP1's to goals of stakeder • Easy to u organisations. Alming to create a nationally used TOM • Offers va (Theme/Outcome/Measures) framework for SV reporting third party	Attempts to identify metrics for individuals. Easy to use and understand Cary to use and understand the Office validation as an independent third party.	Similar to IRIS Confuses inputs, outputs and impacts Possibly reduces impact by assigning a monetary value	Offers a logical approach to measuring impacts, but confuses impacts so not suitable. Monetary value is easily understood but can be easily manipulated. None-monetary outputs include quotes and case studies which can't be easily compared.

Table 1: A comparison of existing social value measurement tools

The comparison of existing measurement tools revealed non-financial metrics were utilised by the ONS wellbeing survey to good effect as the survey uses broader and arguably subjective metrics in an effort to measure numerous social factors (Dolan and Metcalfe, 2012). This research seeks to build upon these findings to develop a non-financial social value measurement tool that can be widely understood and address the limitations of the tools that use financial metrics. Based upon a single main contracting organisation this research seeks to develop and launch a tool aimed at measuring and communicating the social value created by construction industry apprenticeship and work experience programmes. Apprenticeship placements are arguably one of the most prevalent examples of the practices demonstrating the social side of contractor CSR (Morton *et al.*, 2011) with the Government reporting that in 2015/16 the construction industry hired approximately 21,000 apprentices (Mirza-Davies 2016). Therefore, the SV created by such programmes can have a profound

impact upon thousands of individuals both directly and indirectly, with this research seeking to develop a tool to measure and communicate such non-financial impacts.

METHOD

There are three broad stages to the research conducted. The first consists of interviews to help develop the measurement tool, the second involved the distribution of the tool and assessment of its validity and the third stage involves the updating and use of the tool and further interviews with key stakeholders to verify the measurement tool's effectiveness. For the first research stage twenty semi-structured face to face interviews were conducted with staff from a single main contactor to ascertain their views and requirements on a non-financial SV measurement tool. Interviewees were selected using stratified random sampling to ensure participants represented different job roles. Six semi-structured face to face interviews were also conducted with members of procurement teams from public sector bodies with their views and requirements of social value measurement tools discussed. Purposive sampling was utilised to ensure suitable public sector interviewees were selected that best informed the research. An online search was conducted of public sector bodies whose websites state they use the SVA in their construction procurement. Emails were then sent outlining the research and requesting interview participation. This deductive research step was conducted with the intention of eliciting a set of requirements and features that would inform the development of a SV measurement tool.

The results of the interviews were then coded. The codes used were the key requirements of any potential social value measurement tool that emerged from the interviews and literature review. This allowed the responses to be assigned into categories, so the key requirements and potential metrics of a tool could be easily identified. From the results a SV measurement tool was developed in the form of a questionnaire to be distributed to participants for them to rate themselves against several criteria that was judged important from the interviews.

The second research stage involved the piloting of the SV measurement tool to the ten participants of a two-week work experience programme. Nine semi-structured interviews were then conducted, five with participants from the work experience programme, two with the contractor staff in charge of the programme, and two with public sector clients, with the responsibility for the procurement of construction works. The clients were currently working with the contractor on live projects and so interview participants were identified after discussions with the contractor management staff. The interviews focussed around client satisfaction with the output of the SV measurement tool. The results of the interviews revealed both beneficial aspects to the tool and several drawbacks.

The third research stage involved the further development of the SV measurement tool based on the interview feedback. The tool in its revised format was then piloted and distributed to apprentices with semi structured interviews conducted with each of the eight participants on the programme and the single contractor staff member who had responsibility for the programme. Interviews focussed on the perceived success and failures of the SV measurement tool, its accuracy and ease of completion by the participants and the clarity and relevance of the results communicated.

FINDINGS AND DISCUSSION

During several interviews as part of the first research stage it was identified that a SV measurement tool with non-financial metrics was required by both contractors and

clients. It was also confirmed that the same metrics needed to be understood by a broad group of stakeholders. Requirements also included a tool that was easy for the contractor to distribute and use, and simple for participants to complete. As these requirements did not overlap existing measurement tools a new social value measurement tool was developed. The findings of Watts *et al.*, (2018) were built upon in that ambiguous language had been shown to allow the successful communication of social value to multiple stakeholders. Allowing each to understand the contractor's communications but have their own interpretation. The non-financial ONS wellbeing index metrics were identified as ambiguous but

specific enough to meet numerous stakeholders demands simultaneously. In that metrics such as life satisfaction, worthwhile, and happiness were widely understood by all stakeholders, but each had a slightly different interpretation. This could prove beneficial for any SV measurement tool as it could use the same metrics and therefore the results could be widely shared and understood. From the list of stakeholder requirements, a Microsoft Excel based measurement tool was developed as it fit the needs of contractor staff such as using familiar software and being easy to use and share, and also met the needs of public sector bodies in that results could be put into easy to communicate formats. This tool utilised the ONS metrics the interviewee's felt best illustrated the intended impact of social value practices, and also new metrics that were repeatedly raised throughout the interviews such as aspiration, confidence and motivation. The ONS survey has been described as a well-established method of collecting social value data (Dolan and Metcalfe, 2012) and was therefore used as the base and template from which to develop a SV measurement tool. The approach validated in the ONS survey was a questionnaire distributed directly to participants. The ONS survey questionnaire asks participants to rate themselves on a scale of 1-10 against questions asked under each heading. A similar approach was adopted in this research with the social value measurement tool participants asked to rate themselves on a Likert scale of 1-5 regarding their experience, ability and knowledge, with 5 indicating they felt they had the highest experience, ability and knowledge and 1 that their experience, ability and knowledge was basic or lacking. Three questions were asked under each of the six headings and the questionnaire was distributed twice, once at the start of the CSR activity, the other at the end to capture the participants scores for each metric before the SV programme and again after. The results would then be compared and plotted on a graph (figure 1) to illustrate any positive (or negative) changes that may have occurred - evidencing the social value the activity has generated.

The second research stage was the piloting of the measurement tool on a work experience programme and interviewing those involved. The paper-based SV measurement tool questionnaire was developed and distributed to the work experience participants at the start and end of the programme with the same questions in the same format asked on both occasions. The interviews with contractor staff identified several drawbacks to the tool such as the time taken by the contractor staff members to collate and compile all results and the time taken by participants to complete. The interviews with the work experience participants also revealed that by asking the questions twice, at the start and at the end of the CSR activity, most participants were scoring themselves highly on the first set of questions, and so could not improve upon their initial score at the end. At first this was thought to be possibly due to ineffective CSR practices, however, the interviews revealed that participants purposefully 'overestimated' their ability by completing a higher score at the start as they wanted to be seen to have knowledge and competence, even if this was not the case. This was

despite being told before the completion of the tool that the results were to monitor the effectiveness of the programme and not the participants' current ability. It was therefore decided that 'before' and 'after' questions should be combined with participants asked to rate both simultaneously at the end of the activity. The interviews also revealed that some found the questions asked took too long to complete and so it was decided to reduce the number of questions asked under each category from three to two. The client interviews were positive with both clients interviewed finding the impact graph (figure 1) easy to read and understand and were happy with the categories measured. It was reported that the impact graph solved issues clients were having over the non-financial measurement of social value and the communicating of value generated from activities in a clear way that they understood.



Figure 1: Social Value Impact Graph

The third research stage involved the piloting of the SV measurement tool in its new format with reduced question numbers and both 'before' and 'after' questions asked at the same time at the end of the activity. The contractor interview revealed the SV measurement tool was easy to distribute and collate and allowed the contractor to monitor the apprenticeship programme against the non-financial metrics used to see how improvements could be made and to see the impacts of programme decisions on participant wellbeing. The participant interviews revealed the SV measurement tool was easy and straight forward to complete and asking both 'before' and 'after' questions at the same time allowed them to reflect and complete the questions more accurately. As it was already reported that clients were happy with the presentation and communication of the results the SV measurement tool was therefore deemed a success in that for this contractor and the clients interviewed in the research, the tool allowed the subjective concept of SV to be measured and communicated in an objective way using non-financial metrics.

CONCLUSION

This paper presented the development of a social value measurement tool that addressed the tension and conflict at the heart of social value debates; the subjective nature of the concept and the objective need to measure and communicate social value practices. Such a tension has resulted in the availability of numerous social value measurement tools. However, it was found that no existing tool satisfied both the needs of contractors and several public sector clients simultaneously. The social value measurement tool developed was based upon the ONS wellbeing survey and utilised non-financial metrics in the shape of ambiguous terminology. This allowed clients to

interpret the measurement categories in ways that suited their own needs and allowed the contractor to communicate the results to several clients simultaneously. The tool was sought to address deficiencies identified in other measurement tools and to measure SV in a practical and pragmatic manner. In this scenario, and for the contractor and clients interviewed the tool was deemed a success. The findings of this research will assist the construction industry by providing a method of measuring and communicating non-financial social value that has been accepted and embraced by multiple stakeholders simultaneously in a way previous attempts at social value measurement have not. This research contributes to the understanding of how the subjective needs of social value can be objectively actioned and provides a practical alternative method to measure social value in a non-financial way that meets stakeholder needs.

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