Quantifying the Social Value of the UK Construction Industry

Greg Watts¹, Mo Maleki Sadabad², and Waleed Khan³

¹<u>G.N.Watts@Salford.ac.uk</u>, School of Science, Engineering and Environment, University of Salford, UK

²M.N.MalekiSadabad1@salford.ac.uk, School of Science, Engineering and Environment, University of Salford, UK

³<u>M.W.Khan3@salford.ac.uk</u>, School of Science, Engineering and Environment, University of Salford, UK

Keywords: Communication. Reporting. Contractors, Social Value.

Abstract (Maximum 300 words)

Since the introduction of the Social Value Act in 2012, a focus on time, cost, and quality is no longer sufficient to guarantee procurement success. However, to only communicate social value achievements as part of tender submissions may be viewed suspiciously. Therefore, many construction contractors produce annual reports showcasing their social value. Despite this, the construction industry is often viewed negatively, with even positive benefits (such as those arising from social value action) often ignored when forming industry perceptions. However, construction has been a leading industry for creating social value. Yet, as an industry, it often fails to effectively illustrate and quantify the positive societal benefits it creates. This failure is a problem for the whole construction industry as it proliferates the negative perceptions amongst stakeholders and serves to obfuscate the benefits the industry brings to society. The aim of this research is to quantify the annual social value construction contractors create to illustrate the positive benefits that result from industry action. A qualitative content analysis of leading contractor annual reports is undertaken. The results reveal that contrary to some stakeholder perceptions, the social value created each year by the construction industry is substantive and impressive. This research contributes to addressing negative industry perceptions and illustrating the positive societal benefits the construction industry brings above and beyond those of designing, constructing, and maintaining the built environment itself.

INTRODUCTION

The UK economy has arguably had a difficult and eventful period over the past few years (Jozepa, 2023). One result of this has been public sector budget cuts (Stacey, 2024). These budget cuts have resulted in public sector clients trying to utilise essential spending to meet numerous needs, including increasing their focus on maximising social value (Varnas et al 2009). Spending on construction projects falls into this category, and the industry is increasingly viewed at with regards to the high social value it can provide. This has resulted in a changing image of the industry, which for a long time has suffered from negative perceptions due to its wasteful nature and negative environmental impacts (Barthorpe, 2010).

Social value has been increasing in importance in the eyes of all UK construction industry stakeholders since the introduction of the Public Services (Social Value) Act (2012). It is now a key criterion in public sector procurement, and a failure of contractors to clearly communicate their social value offering can result in failed procurement (Mantalban-Domingo et al., 2022). Therefore, contractors are increasingly communicating their social value through a variety of channels and outputs, including social media, online news stories, and via annual reporting (Watts et al., 2019a). However, given the disparate nature of social value, broad quantification must occur to make the social value communicated understood by multiple stakeholders simultaneously (Fernando and Sim, 2011). Despite an increase in SV quantification and communication there is a current gap in understanding around the total social value the construction industry creates. It is important to understand this gap so a greater appreciation can be gained of the UK construction industry, allowing benchmarks to be set and the true impacts of social value to be better understood across multiple industries and sectors. Notwithstanding the accuracies of such quantification tools, the aim of this research is to quantify the social value of UK construction contractors on a macro scale to illustrate the benefits and impact the industry may bring to the UK economy.

First, a background to social value is discussed, and its increasing importance in the UK construction industry presented. The methods and practices involved with social value quantification and communication are then outlined before the Qualitative Content Analysis (QCA) research method is explored. The findings are then discussed, along with their implications for both research and industry practice.

SOCIAL VALUE IN CONSTRUCTION

Definitions of Social Value are subject to ongoing debates between stakeholders (Raiden and King, 2021) but the concept can be broadly described as an organisation, through its strategies and actions, positively contributing to society. This can often be through everyday operations

of the organisation or additional actions an organisation adopts specifically to create social value.

It was the introduction of the Social Value Act (2012) that brought the concept of social value to the forefront of UK construction industry consciousness. However, the idea of business responsibility can be traced back to before the introduction of the Social Value Act. Nevertheless, it was the Social Value Act that arguably legitimised client requests for social value during the procurement of construction works (Daniel and Pasquire, 2018). Prior to this, procurement was focused around the iron triangle of time, cost, and quality, with the Social Value Act adding a fourth area of focus (Wong et al., 2012). Reports show since 2012 the percentage weighting of Social Value in public sector procurement is increasing to such a point of significance, that engagement with the concept can now be the difference between procurement success and failure (Watts et al., 2019b).

Despite the importance of social value, due to its ambiguous nature there remains a diverse range of examples pertaining to its manifestation. For example, social value can include hiring apprentices, working with homeless people, rehabilitating ex-offenders, and donating to charitable organisations (Cabinet Office, 2015). In the literature, debates around reaching agreements have been somewhat sidestepped, with the prevailing discourse acknowledging the definitional diversity that exists, and instead of further discussions on definitions, the focus is on social value as an umbrella style concept under which numerous definitions coexist. Social value is therefore currently a term that covers broad activities. In its expansion as an umbrella like concept, social value has come to also include factors such as environmental issues such as Net Zero (Raiden and King, 2021). Net Zero refers to the emissions released by the world's population to be zero, and any small emission releases above this to be absorbed via carbon sinks or carbon capture technologies, with the UK target to achieve this by the year 2050 (HM Government, 2021). There are also 'internal' considerations to social value, such as the protection of employees in regards to mental health wellbeing and against workplace accidents (Sherratt and Dainty, 2023). The accident frequency rate (AFR) has been increasing in the UK construction industry over the past five years (HSE, 2023). Therefore, the emphasis for all contractors is on reducing the AFR, with 0 the ultimate target, and 0.06 an industry leading AFR as reported by HS2 (2024). Another key element that now arguably sits within the concept of social value is the gender pay gap. The gender pay gap measures the difference in pay received by men and women and was 14.3% less for women than men in 2023 (Francis-Devine, 2024).

Arguably, some of activities that fall under the umbrella of social value lend themselves to be quantified more easily than others. Nevertheless, the prevailing discourse and expectations around social value, and increasing pressures to justify social value as part of procurement, are leading to more and more contactors producing annual reports that illustrate and quantify their social value creation (KPMG, 2022). As the purpose of such reports is to be widely communicated and understood, a method of effectively communicating a concept as varied as social value to as many diverse stakeholders as possible is required. To achieve this the financial quantification of varied social value activities has been introduced.

QUANTIFYING AND COMMUNICATING SOCIAL VALUE

During procurement, where social value is now considered as important of time, cost, and quality (Raiden and King, 2021), how social value is evidence and communicated is of high importance. One study found effective social value, communicated in an ineffective manner, may result in a poorer perception of that contractor compared to a contractor who communicates ineffective social value in a more effective manner (Watts et al., 2019a). One increasingly common method of communicating social value is through its quantification using financial metrics (Watts et al., 2019b). Numerous tools exist that allow a user to quantify and 'calculate' social value using financial metrics. The benefits of such tools include their ability to be widely understood and the opportunity they provide to compare different activities (Watson et al., 2016). The potential drawbacks associated with such social value measurement tools includes their reductionist nature, and the fact that they are unable to measure all activities (Watts et al. 2019).

Notwithstanding the potential inaccuracies, inconsistencies, and conflicting methods of social value financial quantification, the use of such tools allows ease of communication and understanding across multiple stakeholders. It also allows for the macro analysis of the social value construction industry contractors produce. This is the gap in current literature that this research seeks to explore. This gap pertains to the positive social value the construction industry annually creates. Each contractor report arguably publishes an individual 'micro' quantification of SV. A macro level approach is yet to be adopted that quantifies the positive impact construction contractors bring to the UK economy. Conducting such an exercise would illustrate the significance of the construction industry, and evidence its industry leading social value practices.

RESEARCH METHOD

Social value is perceived and discussed in a variety of ways, with actors creating and sustaining their own understandings (Watts et al., 2019b). Therefore, social value research often adopts a constructivism ontological position (see Watts et al., 2019a). This position suggests such phenomena are socially constructed and therefore meanings have the potential to change from one stakeholder to another (Clark et al., 2021). However, despite the qualitative nature of social value arising from its constructivist origins, in an attempt to illustrate the social value they create, UK construction contractors arguably adopt an objectivist ontological approach. Such an approach therefore dictates a positivist epistemology which seeks to objectify knowledge (Robson and McCartan, 2017). Such a positivist approach therefore results in quantitative data, which in the case of social value communication is often expressed financially.

Despite the subjective understandings of social value that exist, this research does now seek to understand contractors' interpretations of social value. Instead, it seeks to utilise the contractors' own quantification methods, and calculate such quantification methods on a macro scale. A process of purposive sampling was adopted whereby participants were purposefully selected for inclusion in the research (Robson and McCartan, 2017). In this instance the top 50 UK construction contractors by turnover in the year 2023 were identified using an online search engine. Contractors were then selected at random from this list and their annual social value or sustainability reports were downloaded. This pattern was repeated until 30 different contractor reports had been identified. Each report was then subject to a Qualitative Content Analysis (QCA). A QCA is a method of identifying and analysing key word and theme use in written documents that provides an additional level of depth and understanding to the concepts analysed (Lock and Seele, 2016). In this instance the QCA was utilised to identify key themes such as social value, charitable partners, work experience, volunteering etc. All data that was contained in the contractor reports that was deemed as relevant to the purposes of the research was then grouped together in the appropriate theme. Once all reports had been reviewed, and all content subject to the QCA, the quantitative data for each theme provided by each contractor was then collated and analysed.

FINDINGS AND DISCUSSION

The macro quantification of contractor social value data revealed several key themes:

Contractor Social Value Reporting Practices

All contractors reviewed undertook some form of SV quantification and communication. As illustrated in table 1.0, seventeen of the contractors published their overall social value generated in financial terms. This equated to £4,538,371,000.00 of UK economic contribution from social value related activities. As an average across the seventeen contractors, this equates to the generation of £266,963,000.00 of social value per contractor. Whilst the average is not representative as some contactors claimed to generate £33,000,000.00 and others £937,000,000.00, it does illustrate the significant social value contribution made by UK construction contractors. In total nineteen contractors also reported their charitable donation figures, which equated to £8,925,526.00, which works out at an average of £469,765 per contractor. Whilst this average figure does not represent all contractors as the individual contractor donations ranged from £27,000.00 to 1,5000,000.00, it again represents the significant economic benefit the construction industry brings. Such high numbers, widely publicised, should arguably address the longstanding negative perceptions of the construction industry held by some (Barthorpe, 2010). However, not all contractors currently measure and report on their SV generated, potentially limiting awareness of the positive SV contribution the industry makes to the economy.

Internal Social Value

The findings also reveal that contractors are also focused on internal social value with 135,121 hours of paid volunteering time afforded to employees from the fourteen contractors who reported such data. A majority of the contractors (twenty four) provided some form of apprentice, work experience, and traineeships to a total of 9,160 individuals. The Accident Frequency Rate on average was 0.33 (from twenty four contactors), with twenty one contractors reporting a AFR of 0.25 or less. However, the gender pay gap was an area the industry could significantly improve upon. The UK average of 14.3% in 2023 (Francis-Devine, 2024) was exceed as the average as reported by twenty five contactors was 25%. The highest reported gender pay gap was 55%, but promisingly, the lowest was 11.80%, although this was the only contractor that reported figures under the UK average.

Environmental Value

Environmentally, contractors also exhibited high performance. Out of the eighteen who had Net Zero target dates listed, fifteen were planning on beating the Government target of 2050 (HM Government, 2021), and the average Net Zero target date from the eighteen contractor reports was quarter four of 2039. Of the seventeen contractors who reported their waste diverted from landfill figures, the average was 96%, with eleven of those reporting 97% or above waste diverted from landfill. However, twelve of the contractors did not report a Net Zero target date, which is a significant minority to not offer any communication on such an important contemporary target.

Contractor	Number of apprentices / graduate / trainees	Total amount of SV generated (in £s)	Total raised for chairty (in £'s)	Staff volunteer hours provided	Tonnes of waste diverted from landfill	Gender pay gap (mean)	Accident Frequency Rate	Net Zero Target
1	360	£937,000,000	£1,500,000	18,986	99%	17.00%	0.11	
2	966	£33,000,000			98%	26.80%	0.06	2040
3	646	£233,000,000	£487,000	42,000	91.50%	20.60%		2045
4	191					24.57%	0.1	2040
5	89		£130,000			20.65%	0.18	2040
6	178	£179,000,000	£457,000.00		98.60%	24.60%	1.51	
7	130			4,500		11.80%		2050
8	197	£682,000,000	£770,000			27.70%	0.03	
9	275					19.58%	0.07	2050
10	156	£435,000,000	£300,000	11,242			0.12	
11	90	£225,000,000	£1,500,000		99.50%	25.20%	0.039	
12	158		£200,000	2,100	99%	20.04%	0.07	2030
13		£391,000.00	£337,000.00	3,300		15.81%	0.09	2035
14				6,000		19.80%		2045
15	236	£328,000,000	£347,000.00	616	94.50%	24.10%	0.09	
16					97%	55.00%	0.12	2025
17	3189	£109,000,000	£131,350			36.00%	0.16	
18	151	£219,000,000	£101,000		97%	23.50%	0.07	2050
19	70	£668,000,000	102,290	19,000	98.40%	25.00%	0.15	
20						39.00%		2040
21	209	£100,000,000	£1,000,000		97%		0.06	2040
22	98	£39,800,000	£1,000,000	824	98.50%	26.40%	0.1	
23	320		£27,000	4,361	75%	22.00%	3.4	
24	200	£88,000,000	£200,000		97.13%	23.70%	0.25	2040
25	630	£54,200,000	£100,000	13,563	96%	31.10%	0.75	2030
26	330				95%		0.2	
27						24.00%		2040
28				5,000		17.00%		2025
29	189	£207,980,000					0.1	
30	102		£235,886.00	3,629	99%		0.05	2050
Total	9,160	£4,538,371,000.00	£8,925,526.00	135,121				
Average	382	266,963,000	469,765	9,652	96%	25%	0.33	2039.72

Table 1.0 Contractor reported quantified social value data

CONCLUSION

UK construction contractors often measure their own SV on an individual organisational basis. However, there is currently a gap in knowledge around the macro level social value benefits the construction industry contributes to the UK economy. By comparing and analysing the 'micro' social value generated by thirty leading UK contractors communicated in their annual reports, this paper quantifies the macro social value generated by a selection of UK main contractors.

The main findings of this study are that on average, thirty of the top fifty UK construction contractors diverted 96% of waste from landfill, and the average target to achieve Net Zero is the year 2039, more than a decade earlier than the current government target. Whilst the average gender pay gap was significantly higher than the UK average (25% compared to 14.3%), and 9,160 apprentice, traineeship, and work experience positions were provided. From the seventeen contractors who financially quantified and communicated social value, the results revealed a total of £4,538,371,000.00 of social value economic benefit was generated, with nineteen contractors also undertaking £8,925,526.00 of charitable giving. The benefits the construction industry brings to the UK economy can therefore be considered vast. It appears many negative perceptions of the industry are outdated, with contractors needing to shout louder about their combined benefit to the broader UK economy through the social value initiatives they undertake.

One limitation of this study is the 'face value' with which each contractor's social value was taken. No interrogation or analysis of the figures presented was undertaken, their accuracy was not subject to any investigation, and all data was included on the presumption each contractor had comprehensively analysed and arrived at their own robust social value figures and that SV measurement tools used are accurate. This may not be the case, and so one recommendation for future research is to investigate the validity of the social value claims made by each contractor. Nevertheless, contactors are recommended to champion the leading position the construction industry plays in social value generation to help promote a more positive perception of the industry as a whole.

REFERENCES

Barthorpe, S. (2010), "Implementing corporate social responsibility in the UK construction industry", Property Management, Vol. 28, No. 1, pp. 4–17.

Cabinet Office. (2015). The Public Services (Social Value) Act 2012: One year on. January 2014. Cabinet Office. London.

Clark, T., Foster, L., Sloan, L, and Bryman, A (2021) Bryman's Social Value Research Methods, 6th Ed, Oxford University Press, Oxford.

Daniel, E, and Pasquire, C (2018) Creating social value within the delivery of construction projects: the role of lean approach. Engineering Construction, and Architecture Management. 26(6), pp1105-1128.

Fernando, M. and Sim, A. (2011), "Strategic ambiguity and leaders' responsibility beyond maximising profits", European Management Journal, Vol. 29 No. 6, pp. 504-513

Francis-Devine, B (2024). The gender pay gap. House of Commons Library. Available at: <u>https://researchbriefings.files.parliament.uk/documents/SN07068/SN07068.pdf</u>

HM Government (2021). Net Zero Strategy: Build Back Greener. Available at: <u>https://assets.publishing.service.gov.uk/media/6194dfa4d3bf7f0555071b1b/net-zero-strategy-beis.pdf</u>

HS2 (2024). How we're performing. Available at: <u>https://safety.hs2.org.uk/how-were-performing/</u>

HSE (2023). Construction Statistics in Great Britain, 2023. Available at: <u>https://www.hse.gov.uk/statistics/assets/docs/construction.pdf</u>

Jozepa, I (2023) Economic update: Short recession looming and concern over US climate policies. Available from: <u>https://commonslibrary.parliament.uk/economic-update-short-recession-looming-and-concern-over-us-climate-policies/</u>

KPMG (2022). Global Survey of Sustainability Reporting 2022. Available at: <u>https://kpmg.com/uk/en/home/insights/2022/10/global-survey.html</u>

Montalbán-Domingo, L., García-Segura, T., Sanz-Benlloch, A., Pellicer, E., Torres-Machi, C., Molenaar, K. (2022). Assessing social performance of construction companies in public-works procurement: Data envelopment analysis based on the benefit of the doubt approach. Environmental Impact Assessment Review, 96.

Raiden. A, and King, A (2021). Social value, organisational learning, and the sustainable development goals in the built environment. Resources, Conservation and Recycling. 172. 105663.

Robson, C, and, McCartan, K. (2017). Real World Research. 4th Edition. John Wiley and Sons. London.

Sherratt, F and Dainty, A (2023). The power of a pandemic: how Covid-19 should transform UK construction worker health, safety and wellbeing. Construction Management and Economics. 41(5), pp379-386.

Stacey, K (2024). UK public services will buckle under planned spending cuts, economists warn. The Guardian. Available at: <u>https://www.theguardian.com/politics/2024/feb/26/uk-public-services-will-buckle-under-planned-spending-cuts-economists-warn</u>

Varnas, A., Balfors, B. and Faith-Ell, C. (2009). Environmental consideration in procurement of construction contracts: current practice, problems and opportunities in green procurement in the Swedish construction industry. Journal of Cleaner Production. 17. p.1214-1222.

Watson, K J, Evans, J, Karvonen, A and Whitley, T (2016) Capturing the social value of buildings: The promise of Social Return on Investment (SROI), Building and Environment, 103, 289-301.

Watts, G., Fernie, S. and Dainty, A. (2019a) Paradox and legitimacy in construction: how CSR reports restrict CSR practice In: International Journal of Building Pathology and Adaptation, Vol. 37 No. 2, pp. 231-246

Watts, G, Dainty, A and Fernie, S (2019b) Measuring Social Value in UK Construction. In: Gorse, C and Neilson, C J (Eds.), Proceedings 35th Annual ARCOM Conference, 2-4 September 2019, Leeds Beckett University, Leeds, UK Association of Researchers in Construction Management, 54-63.

Wong, T.N, Lee, LH and Sun, Z. (2012). CSR and environmental criteria in supplier selection. In: The 13th APIEMS. 2-5 Dec 2012, p74-84.