CIOB Construction Innovation & Quality Scholarship Project

A practical social value measurement framework for facilities management construction in the higher education sector

July 2026

Research Team:

Dr Terence Lam (PI), Associate Professor, Northumbria University
Dr Telsi Rathnasiri (Co-I), Lecturer / Senior Research Assistant, Northumbria University
Dr Nicola Hogan (Co-I), Head of Sustainability at Estates and Facilities, University of East London / Former Sustainability Manager (Operations), King's College London
Dr Malvern Tipping (Co-I), Chairman of Tipping Estates Ltd / Honorary Visiting Senior Fellow at Anglia Ruskin University.

Abstract

Purpose

The integration of social value into Facilities Management (FM) procurement has made significant strides due to its potential to enhance the local environment, uplift community engagement, and support local economies. However, existing literature identifies the lack of standardised metrics for measuring social value as a primary challenge hindering its effective integration. The Chartered Institute of Building (CIOB) highlights that a lack of standardised methodologies among available measurement tools results in confusion and scepticism among both clients and contractors, ultimately stalling the wider adoption of social value initiatives.

This challenge is particularly acute in public-sector procurement, which governs FM construction for university estates - including new builds, refurbishments, and retrofits. According to Office for Students data, there were 124 registered universities in the UK as of December 2022. This dense and distinct sector provides an ideal context for studying social procurement. To address the current measurement gap, this research develops a practical framework for assessing social value in the public-sector procurement of FM construction across UK university estates, ultimately facilitating more effective implementation for broader societal development.

Research Methods

A mixed-methods research design was employed, integrating qualitative case studies, expert review interviews/survey, and a quantitative questionnaire survey. First, four university case studies were conducted with senior estate and procurement staff to initially validate four research hypotheses supporting the conceptual framework. Next, expert review interviews/survey involving 15 professionals were utilised to refine literature-derived social value criteria, outcomes and wellbeing measures, and to triangulate and validate the hypotheses and conceptual framework. To generalise these findings, a quantitative questionnaire survey was administered to 58 participants, establishing the practical and important social value outcomes that should be adopted within the final framework. Qualitative data from the case studies and the expert review were evaluated using deductive thematic analysis. For the quantitative survey data, practicality of the social value outcomes was estimated using weighted means, while their importance was determined via the Relative Importance Index (RII). Finally, weighted means of the importance scores were calculated to serve as ordinal proxies (1 to 5) representing the impacts of individual social value outcomes.

Findings

Results from the qualitative and quantitative studies validated all the research hypotheses and identified a total of 47 distinct social outcomes. The practical measurement framework was methodologically validated and generalised, successfully translating broad social, environmental, and economic outcomes into these measurable indicators. By utilising ordinal proxy values, these practical indicators can be explicitly specified in tender documents, monitored throughout contract delivery, applied in investment appraisals, and integrated into restructured non-monetised proxy-based evaluation approaches.

Significance and Stakeholder Benefits

This novel practical framework and its ordinal proxy values enable construction professionals to select the most suitable contractors during procurement using a Social Return on Investment (SROI) to tendered cost ratio, while monitoring performance during construction via the Total Wellbeing Score (TWS) indicator. For university clients, the framework facilitates informed investment decisions by leveraging the SROI to investment cost ratio. Furthermore, policymakers can utilise these findings to refine legislation and guidelines on social procurement to better achieve policy objectives. Ultimately, the framework reduces ambiguity in the construction industry by clarifying tendering requirements based on social value, which ultimately improves bid quality, enhances service delivery, and fosters broader socioeconomic and environmental wellbeing for communities and society.

Keywords: FM construction, Social value, Practical measurement framework, Non-monetised ordinal proxy values, UK university sector

1. Introduction

1.1 Problem Statement

Social value refers to the non-financial benefits generated by activities, policies, or initiatives that enhance community development, such as supporting local economies and small-to-medium enterprises (SMEs), creating employment and skill training opportunities, reducing environmental impacts, and fostering stronger community engagement (Loosemore *et al*., 2021; Lam, 2020). In the UK, delivering social value is increasingly mandated in public construction procurement under the Public Services (Social Value) Act 2012 and the Procurement Act 2023.

- However, widespread social value implementation across the construction sector remains immature. The CIOB (2022) *Social Value Baseline Report* and the CIOB (2023) *Special Report on Social Value and SMEs* highlight that monetised measurement frameworks such as TOMs, LOOP, and HACT are frequently criticised by clients, contractors, and supply chains for being overly complex and time-consuming. This challenge is further compounded by a lack of standardised methodologies, software technologies, and unified calculation rules, which breeds confusion and scepticism among industry stakeholders (CIOB, 2025). Consequently, there is an urgent need for guidance on how social value indicators can be translated into operational measurement systems that effectively support procurement decision-making and project performance monitoring (Lou *et al.*, 2023).

- This measurement deficiency is particularly acute within the UK higher education sector. Universities operate vast, complex built environments - encompassing academic buildings, research facilities, student accommodation, and community infrastructure (Selviaridis *et al.*, 2023) - yet they lack the practical tools required to measure and integrate social value into construction projects. With 124 registered universities in the UK and a total capital expenditure amounting to £4.55 billion in 2022/23 (HESA, 2024), this unique public sector represents a massive area of impact. Addressing the current lack of a sector-specific measurement tool is crucial to successfully embedding social value within university estate Facilities Management (FM) procurement, ultimately driving broader societal development.

1.2 Research aim

This research aims to develop a practical measurement framework for assessing social value in the public-sector procurement of FM construction across university estates. By doing so, it seeks to optimise the social, economic, and environmental benefits derived from construction activities and ultimately to drive societal wellbeing and development.

1.3 Research objectives

- To identify the comprehensive social, economic, and environmental outcomes desired by university clients for major capital projects.

- To evaluate the practicality of these outcomes, ensuring they are easy to understand, straightforward to apply, and economical to deliver.

- To isolate and prioritise the specific social value outcomes that exert a critical impact on community and stakeholder wellbeing.
- To establish an efficient quantification method for these outcomes by utilising non-monetised, ordinal proxy values.
- To develop and validate an operational measurement framework that facilitates social procurement across the project lifecycle: encompassing initial capital planning investment decisions, supplier selection, and construction-phase performance monitoring.

1.4 Research Scope

The scope of this study is focused on the social procurement of major capital projects across UK university estates, specifically encompassing new builds, large-scale refurbishments, and retrofits.

2. Conceptual measurement framework: Theoretical basis

2.1 Measuring individual social benefits and impact

To establish a comprehensive foundation for university FM projects, individual social value measures across economic, environmental, and social dimensions were systematically reviewed and contextualised based on existing literature (e.g., Lam, 2020; Loosemore, 2021; Government Commercial Function, 2020), as summarised in **Table 1**.

- These measures align with the social value outcomes mandated by key legislative frameworks in the UK. This includes the *Public Services (Social Value) Act 2012*, alongside its supporting *Social Value Model* (2020), which integrates the 17 UN Sustainable Development Goals (SDGs), and the *Procurement Act 2023*.
- The resulting measures are categorised into six distinct social value criteria: Employment opportunities, Employment policy and economic impact, Energy efficiency, Sustainable construction management, Other sustainable design elements, and Community engagement.
- Within this framework, each criterion is further subdivided into specific social, environmental, and economic outcomes, which are evaluated using wellbeing units. To determine the overall impact of a given outcome, these wellbeing units assessed during the capital planning and procurement phases or achieved during the construction phase are multiplied by related non-monetised Ordinal Proxy Values.
- This non-financial approach is fundamentally grounded in the Subjective Theory of Value (Menger, *et al.*, 2007), which posits that value is intrinsically tied to personal desire and utility. Consequently, value fluctuates based on the user's perspective, priorities, and specific context, varying from person to person according to individual judgments of marginal benefit. Because of this inherent subjectivity, social impact can be more accurately measured via an output proxy value determined contextually by the assessor, rather than through the rigid, pre-set financial proxy values commonly

adopted in standard measurement tools. This study therefore hypothesises that an ordinal ranking scale of 1 to 5 can effectively represent the significance of a social value outcome, where 5 indicates a highly significant impact and 1 indicates the lowest.

- This methodology directly addresses the limitations of existing tools like TOMs, THRIVE, and HACT, which rely on tedious frameworks of roughly 100 outcomes and obscure financial proxy values that are both time-consuming to operationalise and difficult for industry stakeholders to understand (CIOB, 2022; Loosemore *et al.*, 2021).

2.2 Measuring total social value and social returns

According to Perrini *et al.* (2020), Social Return on Investment (SROI) is the most widely adopted methodology for evaluating social impact. However, conventional SROI requires converting all social and environmental outcomes into monetised values using the following baseline formula: SROI conventional = monetised social value impacts/cost.

Because this conventional approach relies on the complex and often subjective valuation of intangible outcomes, it can be highly inefficient. To address this limitation, the framework developed in this study replaces monetised metrics with a scoring system. By multiplying an assigned ordinal proxy value by the number of wellbeing units achieved during a specific construction project phase, an overall impact score for each social value outcome is determined. These individual scores are aggregated to calculate the Total Weighted Score (TWS) for social value, which represents the combined social, environmental, and economic impacts of the project.

The TWS serves as the foundation for evaluation tools across three distinct project phases:

- **SROI Investment Appraisal** = TWS/investment cost ratio (for investment appraisal at the feasibility study phase)
- **SROI Procurement Selection** = TWS/tendered cost ratio (for selecting facilities management suppliers at the tender phase)
- **TWS** = Total Weighted Score of social, environmental, and economic impacts (for performance monitoring during the construction phase). See below.
- In both the investment appraisal and procurement selection ratios, the numerator represents an aggregated ordinal value, while the denominator represents a factual cost figure. Utilising these hybrid ratios avoids complex financial valuations and reduces the heavy dependency on financial metrics characteristic of conventional SROI, ultimately offering a practical, efficient tool for total social value measurement.
- Furthermore, Skidmore (2021) notes that value is highly context-dependent, suggesting that a localised 'welfare weight' should be applied to account for the unique socio-economic backgrounds of different stakeholder groups. Incorporating these local weightings, the total project impact can be modelled mathematically.
- **TWS = a + b + c**, where

  Social Impact (a): Weighting $\times \sum$(Social Wellbeing Units $\times$ Ordinal Proxy Value)

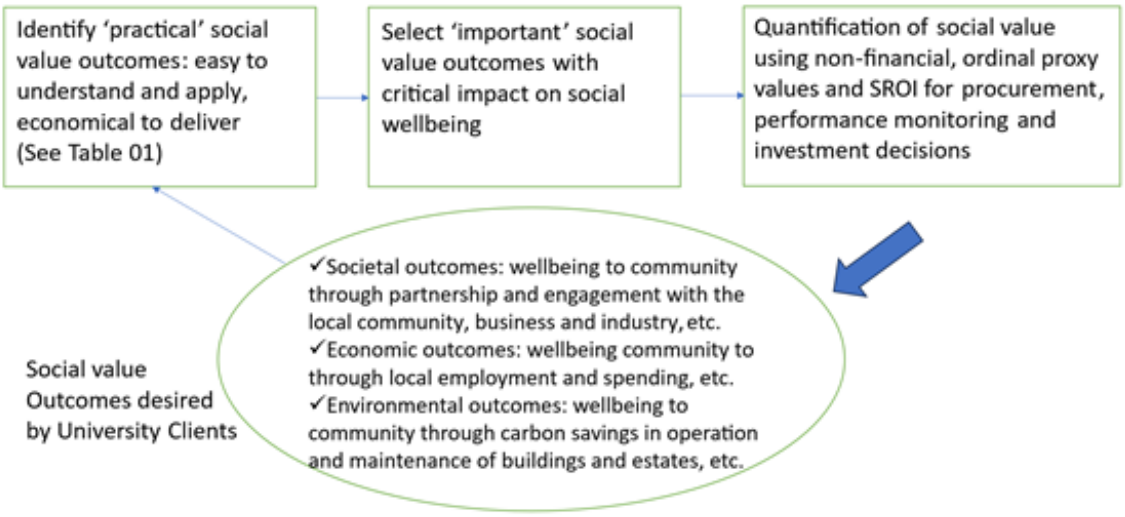
Environmental Impact (b): Weighting × ∑(Environmental Wellbeing Units × Ordinal Proxy Value)

Economic Impact (c): Weighting × ∑(Economic Wellbeing Units × Ordinal Proxy Value)

- The weightings are determined according to the local context. A list of practical and important wellbeing measures and their ordinal proxy values are finalised in **Table 1**. At the investment appraisal phase, the number of wellbeing units are estimated according to the nature of the project. For procurement selection, the number of wellbeing units are assessed based on the tender proposal. In relation to performance monitoring, the number of wellbeing units refer to the actual impacts achieved by the contractor.

By integrating the TWS alongside the corresponding SROI Investment Appraisal and SROI Procurement Selection assessment tools, a practical conceptual measurement framework is established, as illustrated in **Figure 1**. This framework is efficient to operate using ordinal proxy value and covers three critical phases of a project.

Figure 1. Conceptual Measurement Framework of Social Value



3. Research Hypotheses, Methods and Validation

3.1 Research Hypotheses

The following research hypotheses (RH) were developed to support and validate the conceptual framework:

- RH1: Practical and significant social values can be effectively measured using non-monetised, ordinal proxy values (1 to 5) that represent local impacts on community wellbeing when adjusted by socio-economic welfare weightings.
- RH2: The SROI Procurement Selection ratio functions as a reliable value-for-money tool for evaluating and selecting FM suppliers during the competitive tendering.

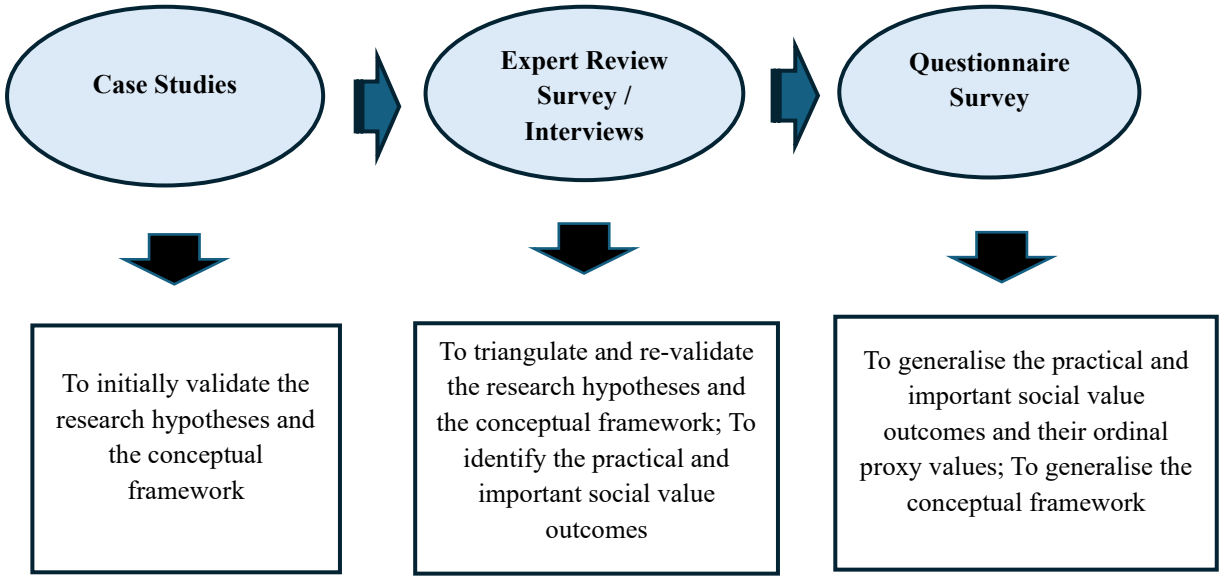
- RH3: SROI Investment Appraisal ratio serves as an effective cost-benefit tool to assess the economic and social viability of investing in new university builds, asset refurbishment or retrofits.
- RH4: The TWS aggregating all weighted social, environmental, and economic outcomes serves as an accurate performance monitoring and compliance index during the active construction phase.

3.2 Sequential Research Methods

A mixed-methods research design was employed to achieve the research objectives, structured sequentially as illustrated in **Figure 2**. This design integrated qualitative case studies, an expert review survey, and a quantitative questionnaire survey.

- First, four university case studies were conducted with senior estate and procurement staff to initially validate the foundational research hypotheses supporting the conceptual framework. By validating these hypotheses through the perspectives of key institutional stakeholders, the study ensured that the proposed framework remained practically relevant and firmly grounded in industry-specific operational knowledge (Yin, 2018).
- Following the case studies, expert review survey/interviews involving 15 professionals were conducted to refine the literature-derived social value criteria, outcomes and wellbeing measures, and triangulated to validate the hypotheses and the conceptual framework. These professionals included including FM managers, sustainability managers, procurement managers, and contractors with 6 to 14 years of extensive practical experience in social procurement. They were also located across the UK (England, Wales, Scotland and Northern Ireland), thus generally represented the estate practices in managing social value in construction projects. In line with empirical research conventions, a sample size of at least eight participants is sufficient to ensure data saturation in expert reviews (Farrell and Sunindijo, 2022); thus, the 15 experts engaged here provided a robust foundation for verification.
- To generalise these findings, a quantitative questionnaire survey was administered to 58 front-line procurement and sustainability managers across various university estates in the UK. This sample size satisfies the empirical threshold suggested by Fellows and Liu (2021), who note that 32 completed datasets can produce statistically meaningful results within construction management research. This broader survey established the consensus on which practical and important social value outcomes should be formally adopted within the final framework. This phase assessed the practicality and importance of the proposed measures on a five-point Likert scale.
- Data analysis was conducted symmetrically across both paradigms. Qualitative data from the cases studies and the expert review were evaluated using deductive thematic analysis. For the quantitative survey data, the operational practicality of the social value outcomes was estimated using weighted means, while their overall importance was determined via the Relative Importance Index (RII). Finally, the weighted means of these importance scores were calculated to serve as the ordinal proxy values for individual social value outcomes within the measurement framework, forming an operational, efficient social value bank.

Figure 2. Sequential Research Methods



3.3 Discussion and Validation

- The empirical results from both the sequential qualitative and quantitative phases successfully validated all proposed research hypotheses. Through this comprehensive validation process, a final set of 47 social value wellbeing measures was established. These measures were proven to be both highly practical to monitor and capable of exerting a significant positive impact on community and societal wellbeing. Restricting measurement to practical, high-significance outcomes avoids "over-specification," which often dilutes managerial focus and inflates reporting burdens (Lashitew *et al.*, 2020).
- To ensure methodological rigor, these practical and important wellbeing measures were filtered and validated against two strict statistical thresholds derived: a weighted mean greater than 3.6 ($\bar{x} > 3.6$) and a Relative Importance Index greater than 0.7 ($\mathrm{RII} > 0.7$).
- Measures were retained as “practical” when the weighted mean was at least 3.6. This cut-off was chosen because, in the conservative case where all other responses are neutral, a mean of 3.6 implies that at least 60% of respondents rated the measure in the top two categories (very easy or extremely easy). Accordingly, using 58 responses with 40% selecting score 3 and 60% selecting score 4, the weighted mean was calculated as, Weighted mean = $[(58\times0.40\times3) + (58\times0.60\times4)] \div 58 = 3.6$
- Measures were retained as “significant” when the RII was at or above 0.70. The 0.70 cut-off is justified as RII scales from 0 to 1, and a value of 0.70 indicates a clear tilt toward the upper response categories on a 1–5 scale, signifying that respondents generally judged the outcome as significant (Alghuried, *et al.*, 2023).
- Measures meeting or exceeding these criteria were used to construct a localised social value bank. Within this bank, the calculated weighted means of the importance scores serve as the definitive non-monetised ordinal proxy values for each individual outcome.

Table 1 summarises the social value outcomes / wellbeing measures and their practicality, importance and ordinal proxy values forming the social value bank.

- This study contributes to social value assessment by embedding ordinal proxies within a Total Weighted Score (TWS) framework and adapting the Social Return on Investment (SROI) concept into two ratio-based tools:
- $\frac{\text{TWS}}{\text{Investment Cost}}$ and $\frac{\text{TWS}}{\text{Tendered Cost}}$
- Prior research highlights that financial valuation is resource-intensive, methodologically complex, and insensitive to local contexts (Troje, 2023). Experts in this study echoed these concerns, noting that relying solely on monetised proxies risks misrepresenting intangible outcomes like community cohesion and wellbeing. Strong support emerged for using non-monetised ordinal proxy values to represent outcome importance. This approach addresses the data-heavy complexity and contested monetary proxies associated with existing frameworks like TOMs, HACT, and LOOP (Agustin & Soewandi, 2022; CIOB, 2022).
- Contextual weighting proved to be a critical design feature. Because identical outcomes carry different priorities across socioeconomic settings, the flexible TWS formulation allows universities to adjust weightings based on local institutional missions (Tareq *et al.*, 2021).
- Ultimately, the overarching measurement framework was successfully validated and methodologically generalised. The framework effectively translates broad social, environmental, and economic outcomes into clear, measurable indicators via the localised proxy values. This operational data structure allows the indicators to be seamlessly specified within public-sector tender documents, monitored as key performance compliance metrics in active contracts, utilised in initial capital investment appraisals, and directly integrated into reorganised, proxy-based evaluation tools, as illustrated in **Figure 3**.

Table 1. Social value outcomes / wellbeing measures and their practicality, importance and ordinal proxy values

Criteria	Outcomes	Measures	Weighted Mean for practicality	RII Value for importance	Ordinal Proxy Value (weighted means of importance scores)
C-1 Employment Opportunities	Social	Generation of jobs for local communities	3.741	0.748	3.832
		Apprenticeships and youth engagement	3.690	0.738	3.552
		Job creation for marginalised and underrepresented groups	3.603	0.721	3.771
	Environmental	Reduced carbon footprint via localised employment	3.666	0.693	3.550
		Provision of training for sustainable practices	3.690	0.738	3.850
		Provision of skills for sustainable practices	3.655	0.731	3.646
	Economic	Increased household incomes	3.759	0.752	3.958
		Improved workforce productivity	3.776	0.755	4.292
		Reduction of unemployment rates	3.724	0.745	3.596
C-2 Employment Policies and Impact	Social	Inclusion of diversity, Gender and racial equality	3.741	0.748	3.875
		Support for SMEs and diverse suppliers fostering inclusivity	3.672	0.734	3.299
		Reduced human and labour rights violations in supply chains	3.759	0.752	3.708
	Environmental	Improved environmental stewardship	3.672	0.734	3.617
		Organisational initiatives for promoting sustainability in the community	3.724	0.745	3.917
		Application of sustainability policies and strategies	3.741	0.748	3.958
	Economic	Local economic development	3.655	0.731	3.792
		Employee retention	3.621	0.724	3.938
		Improved productivity at work	3.828	0.766	3.813
C-3 Energy Efficiency	Social	Implementation of water conservation practices	3.810	0.762	4.021
		Implementation of energy-efficient heating and cooling systems	3.810	0.762	3.792
	Environmental	Integration with renewable energy for carbon reduction	3.638	0.728	3.896
		Reduction of energy and carbon emissions for lighting and air ventilation	3.741	0.748	3.854
	Economic	Increased annual water cost savings	3.828	0.766	3.750
		Reduction of total operational costs	3.879	0.776	4.021
		Cost savings via use of natural lighting and control of air quality	3.741	0.748	3.792
C-4 Other Sustainable Design	Social	Green landscaping for biodiversity enhancement	3.914	0.783	3.917
		Integration of green features (green roofs, rain gardens)	3.914	0.783	3.921
		Improved access and inclusivity	3.793	0.759	3.820
	Environmental	Reduced carbon footprint	3.741	0.748	3.708
		Energy efficiency improvements in retrofitting buildings	3.707	0.741	3.854
	Economic	Reduced operational costs	3.776	0.755	3.813
		Lower insurance premiums	3.776	0.755	3.833
		Reduced cost through retrofitting and energy improvement	3.845	0.769	3.625
C-5 Sustainable Construction	Social	Support for local recycling markets.	3.793	0.759	3.708
		Community-driven recycling and reuse projects	3.793	0.759	4.031
		Health and safety design and inspections to minimise accidents	3.724	0.745	3.864
Management (Waste and Site Safety)	Environmental	Minimised environmental risks	3.586	0.717	4.022
	Economic	Reduced disposal costs	3.586	0.717	4.581
		Revenue generation from recycled and reused materials	3.741	0.748	3.874
		Increased project efficiency	3.828	0.766	3.785
C-6 Community Engagement	Social	Engagement of minority-owned and social enterprises	3.793	0.759	4.055
	Environmental	Promotion of community-led sustainability initiatives	3.879	0.776	3.843
		Enhanced resource efficiency	3.877	0.775	3.652
		Incorporation of green infrastructure	3.862	0.772	4.000
	Economic	Increased local business opportunities	3.879	0.776	4.421
		Revenue generation from the community use of facilities	3.845	0.769	3.651
		Support for the circular economy implementation in the community	3.810	0.762	3.985

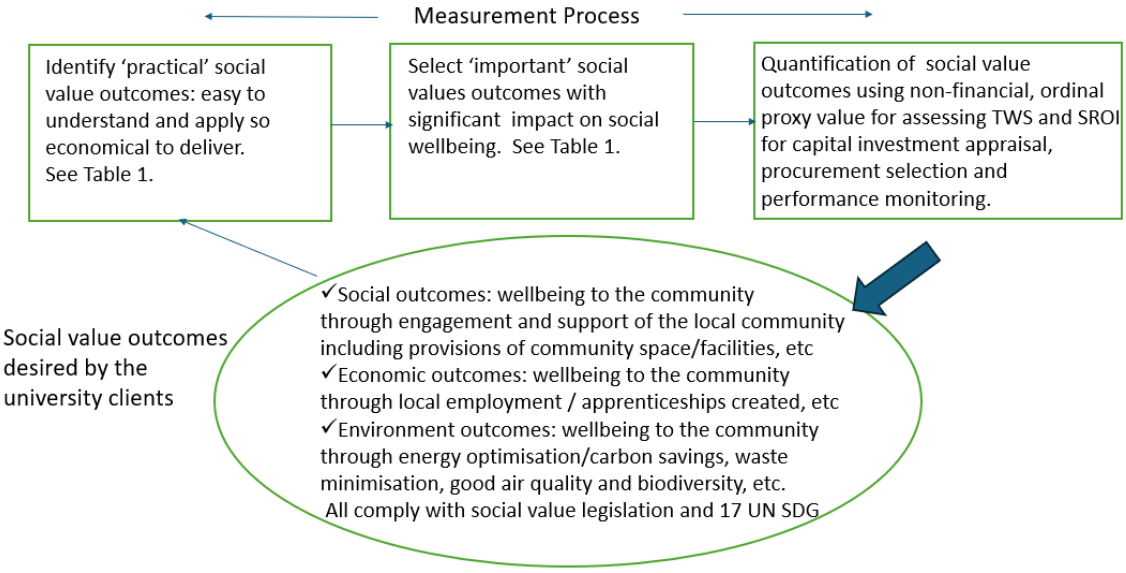


Figure 3. Validated practical measurement framework for embedding social value in FM construction

4. Conclusions

4.1 Summary of findings

- This research successfully identified 47 distinct social value outcomes that are both highly practical to monitor and significantly important for driving community and societal wellbeing. To operationalise these findings, a novel measurement framework was developed to translate broad social, environmental, and economic outcomes into explicit, measurable indicators via non-monetised ordinal proxy values (1 to 5). **Table 3** and **Figure 3** refer.
- The resulting framework integrates three specialised assessment tools designed to evaluate and monitor social value across critical project phases effectively and efficiently:
- (1) Total weighted score of all social value wellbeing (TWS). Functions as a performance monitoring and compliance tool during the active construction phase by aggregating the weighted scores of all validated social, environmental, and economic outcomes. **Section 2.2** refers.
- (2) SROI Procurement Selection (TWS/tendered cost). Serves as a value-for-money metric during the tendering phase, enabling university clients to select socially competent FM suppliers.
- (3) SROI Investment Appraisal (TWS/investment cost). Operates as a cost-benefit tool during the initial feasibility phase to assess the economic and social viability of investing in new builds, large-scale refurbishments, or retrofitted facilities assets.
- Additionally, this study established a localised "social value bank" populated by the newly developed ordinal proxy values. This bank provides the foundational data structure required to support the three assessment tools, offering the higher education

sector an efficient, non-monetised alternative to traditional social procurement tracking through a complex valuation process. **Table 1** refers.

4.2 Social contributions

- The practical framework and its underlying ordinal proxy values offer significant contributions to professional practice, institutional decision-making, and public policy. By providing an efficient, non-monetised alternative to traditional tracking, these tools are crucial to successfully embedding social value within university estate FM procurement and driving broader societal development.

4.3 Practical contributions to industry practitioners and university clients

- This practical framework directly improves professional practice by enabling building professionals to select the most suitable contractors during the procurement phase and monitor their ongoing performance during the construction phase using the SROI Procurement Selection and TWS tools respectively. For university clients, the framework provides a structured mechanism to make informed, data-driven decisions on competing investment options during capital planning via the SROI Investment Appraisal tool.

4.4 Contributions to the construction industry and supply chain

- Most importantly, the practical framework addresses long-standing ambiguities within the construction supply chain. By introducing clear, practical, and structured social value wellbeing measures, it facilitates a transparent tendering process. Contractors are given explicit clarity on what evidence must be provided (see **Table 3**), which reduces ambiguity, improves overall bid quality, and allows firms to add distinct value to their services. With these clearly defined benchmarks, contractors can reliably deliver required project outcomes, make informed internal improvements, and provide superior services to public-sector clients, ultimately enhancing their competitiveness in future procurement and boosting long-term business sustainability.

4.5 Implications for policy and governance

- Beyond project-level applications, policymakers can leverage this practical measurement framework and its associated assessment tools to refine and re-draft public procurement legislation and operational guidelines. Grounding future policies in structured ordinal proxy systems provides a realistic pathway to improve the delivery of macro-level policy objectives, successfully bridging the gap between legislative mandates and industry compliance.

4.6 Research Implications

- While this study provides valuable, targeted insights for the higher education sector, the findings are bounded by their institutional context and may not fully represent the operational dynamics of other public sectors. To address this limitation and maximise the impact of this work, future research should adapt and extend the framework to other critical public-sector domains, such as healthcare, social housing, and transport infrastructure. Broadening the scope in this manner will allow the wider public sector

and the broader construction industry to benefit from the measurement framework and non-monetised social value tracking.

- Furthermore, because the developed social value bank and its underlying ordinal proxy values are inherently localised, further investigations should focus on establishing methodologies to dynamically adjust these proxy values based on the specific priorities, community stakeholder demographics, and unique contexts of different construction clients and social value practitioners.
- Finally, future studies should explore the integration of these social value measurement tools with emerging digital procurement and artificial intelligence (AI) platforms. Leveraging AI technologies could enable automated data capture, streamline the calculation of the TWS, and facilitate real-time performance monitoring during the construction phase, thus significantly reducing the administrative burden on supply chains.

Acknowledgement

This research was conducted between September 2024 and December 2025. It was funded by the Chartered Institute of Building CIOB, whose support is greatly acknowledged. In addition, those universities, practitioners and participants who responded to the case studies, expert reviews and questionnaire survey are much appreciated. Finally, the research team is very thankful for the support from Northumbria University, School of Architecture and Built Environment, and King's College London, Estate Office. They all make a significant contribution to the success of this project.

Correspondence Author

A/Prof Terence Lam can be contacted via tymlam@yahoo.co.uk

References

Alghuried, A. (2023). Measuring the benefits and barriers of the implementation of BIM in sustainable practice in the construction industry of Saudi Arabia. *Sustainability*, *15*(19), 14323. https://doi.org/10.3390/su151914323

Agustin, K., & Soewandi, H. (2022). Capturing Social Value using Ordinal Data, Gower Distance & Quality Point. 24th ASEAN Valuers Association (AVA) Congress. https://repository.petra.ac.id/19896/

CIOB (2022), *Social value baseline report*. Chartered Institute of Building, available at https://www.ciob.org/ , accessed on 26 June 2026.

CIOB (2023), *Special report on social value and SMEs*, Chartered Institute of Building, available at https://www.ciob.org/ , accessed on 26 June 2026.

CIOB (2025), "Social value in public sector projects", *Construction Management,* March 2025, pp.38-42.

Farrell, A. and Sunindijo, R.Y. (2022). Overcoming challenges of early contractor involvement in local government projects. *International Journal of Construction Management*, 22(10), 1902-1909. https://doi.org/10.1080/15623599.2020.1744216

Fellows, R. and Liu, A. (2021). *Research Methods for Construction.* John Wiley & Sons Ltd, Chichister.

Government Commercial Function (2020), Government commercial function, available at https://www.gov.uk/government/organisations/government-commercial-function (accessed on 10 December 2025).

HESA (2024), *Higher education provider finances: UK, 2022/23* [Statistical bulletin], Higher Education Statistics Agency, available at https://www.hesa.ac.uk/ , accessed on 10 December 2025.

Lam, T. Y.M. (2020). A sustainable procurement approach for selection of construction consultants in property and facilities management. *Facilities*, *38*(1/2), 98-113. https://doi.org/10.1108/f-12-2018-0147

Lashitew, A. A., Van Tulder, R., & Muche, L. (2020). Social value creation in institutional voids: A business model perspective. *Business & Society*, *61*(8), 1992-2037. https://doi.org/10.1177/0007650320982283

Loosemore, M., Osborne, J., & Higgon, D. (2021). Affective, cognitive, behavioural and situational outcomes of social procurement: A case study of social value creation in a major facilities management firm. *Construction Management and Economics*, 39(3), 227–244. DOI: https://doi.org/10.1080/01446193.2020 .1851035

Loosemore, M., Osborne, J., & Higgon, D. (2021). Affective, cognitive, behavioural and situational outcomes of social procurement: A case study of social value creation in a major facilities management firm. *Construction Management and Economics*, 39(3), 227–244. DOI: https://doi.org/10.1080/01446193.2020 .1851035

Lou, C. X., Natoli, R., Goodwin, D., Bok, B., Zhao, F., & Zhang, P. (2023). A systematic literature review of research on social procurement in the construction and infrastructure sector: Barriers, enablers, and strategies. *Sustainability*, *15*(17), 12964. https://doi.org/10.3390/su151712964

Menger, C. Klien, P.G. & Hayek, F.A. (2019). *Principles of Economics.* Ludwig von Mises Institute.

Perrini, F., Costanzo, L. A., & Karatas-Ozkan, M. (2020). Measuring impact and creating change: A comparison of the main methods for social enterprises. *Corporate Governance: The International Journal of Business in Society*, *21*(2), 237-251. https://doi.org/10.1108/cg-02-2020-0062

Selviaridis, K., Luzzini, D., & Mena, C. (2023). How strategic public procurement creates social value: Evidence from UK anchor institutions. *Public Management Review*, 1-29. https://doi.org/10.1080/14719037.2023.2277814

Skidmore, R. (2021), Measuring social value: Can we agree on a metric? Available at athttps://www.thedeveloper.live/places/places/measuring-social-value-can-we-agree-on-a-metric#:~:text=Proxy%20values%20use%20public%20sector,primary%20source%20for%20these%20values (accessed on 16 October 2024).

Tareq, M., Abdel-Razzaq, A. I., Rahman, M. A., & Choudhury, T. (2021). Comparison of weighted and unweighted methods of wealth indices for assessing SOCIO-ECONOMIC status. Heliyon, 7(2), e06163. https://doi.org/10.1016/j.heliyon.2021.e06163

Troje, D. (2023). Improving social value through facilities management: Swedish housing companies. *Buildings and Cities*, *4*(1), 749-766. https://doi.org/10.5334/bc.327

Yin, R.K. (2018). *Case Study Research and Applications: Design and Methods*. Sage Publishing, CA.