

Institution: University of Salford
Unit of Assessment: C16 Architecture, Built Environment and Planning
Title of case study: Procuring Social and Economic Value through Construction
<p>1. Summary of the impact (indicative maximum 100 words) <i>Procuring Social and Economic Value through Construction</i> is focused on improving the sustainability and profitability of, and ensuring public benefit from, the UK construction sector, demonstrating the following impact:</p> <ul style="list-style-type: none"> • Guiding progress towards sustainable construction practice, generating wider social and economic benefit, through better informed construction procurement; • Improving the performance of existing construction projects and businesses; • Commercialising new products and support services to construction clients and suppliers; • Informing public policy through a range of impacts - most recently the Government Construction Strategy and Infrastructure Cost Review and Implementation.
<p>2. Underpinning research (indicative maximum 500 words) The key researchers and positions they held at the institution at the time of the research are as follows: Peter McDermott, Professor of Construction Procurement (from 1993), Peter Barrett, Professor of Management in Property and Construction (from 1991). Context: In 1998, a report for UK government entitled "<u>Rethinking Construction</u>" identified 'five key drivers of change which need to set the agenda for the construction industry: committed leadership, a focus on the customer, integrated processes and teams, a quality driven agenda and commitment to people.' In 2002 the <u>EPSRC Innovative Manufacturing Initiative</u> further challenged the construction sector to 'adopt a radical change programme based upon both a re-organisation of the way that work is procured and the way that work is managed and integrated.' Each recognised that the way that work is placed in the construction sector should be used to shape the sector and to drive performance improvement beyond cost efficiencies to include wider social and economic benefit. From 2001 Salford determined that projects supported by the EPSRC Innovative Manufacturing Initiative (IMI): Salford Centre for Research and Innovation in the Built Environment (SCRI) should demonstrate impact beyond academia. Salford has achieved this aim by working with UK national government through current and previous administrations, and local government and industry to support the development of regional and national implementation mechanisms following from Rethinking Construction. The impact of <i>Procuring Social and Economic Value through Construction</i> is underpinned by the following research:</p> <ul style="list-style-type: none"> • 2002: <u>Trust in Construction</u> developed a social/psychological model focused on the trust elements of team integration and how different project factors affect the formation of trust. A Trust Inventory and a relationship mapping tool were developed, to identify trust-based team structures. These were supported by additional tools incorporated into the workshop to address mutual objectives, performance measurement, roles and responsibilities, team structures and dispute resolution. The research found that trust by itself would not change performance but needs to be inextricably linked to full management interventions; improved processes and procedures; and pointed towards supply chain integration and collaborative working. [1,2,3] • 2007: <u>Revaluing Construction (RC)</u> led by Salford on behalf of the <i>International Council for Research and Innovation in Building and Construction</i> (CIB – Conseil International du Bâtiment) was focused on building progressive and significant change in the construction industry at a national policy level, based on a series of international structured workshops of major stakeholders in five countries. The research emphasised the economic benefit of the construction sector, at approximately 20% of gross domestic product; the importance, but difficulty, of creating a consensual national vision; and, the potential of 'covenantal' as well as contractual relationships in thriving sectoral improvements. [6] • 2007: <u>Policy Through Procurement</u>: A range of public construction procurement case studies, where the clients attempted to use procurement as a policy instrument to drive socio-economic community benefits, were reported. The main observations revealed that

'policy through procurement initiatives' require full integration into procurement, integrated as early as possible in the procurement process and actively managed through each stage of procurement. [5]

- **2009:** Procuring Value demonstrated the benefit of the Specialist Task Organisation (STO) procurement approach in achieving triple bottom-line sustainability goals. The research demonstrated that the STO approach can achieve sustainability through embedding sustainable environmental clauses at the onset, offering an overall value-adding process to value engineering management and whole-life costing in the early stages of projects with beneficial effects resulting from specialist involvement in community and social benefits for the stakeholders. [8]
- **2010:** Integrating the Supply Chain ascertained the level and form of integration in the UK construction industry, utilising theoretical analyses of the concepts and measures of fragmentation, social and economic notions of integration, and trending analysis of UK construction statistics data, which was used to positively correlate the distribution of different sizes of firms, different type of trades and the value of projects between 1995 and 2005. The research found that the UK construction industry was not economically integrated, rather the industry utilises social integrative devices, for example, collaborative arrangement, framework arrangement, partnering, rather than full integration of process. [4,8]

3. References to the research (indicative maximum of six references)

Key outputs

1. Wood, G & McDermott, P & Swan, W (2002), The ethical benefits of trust-based partnering: the example of the construction industry, *Business Ethics: A European Review*, 11(1), pp.4-13. [DOI](#)
2. McDermott, P & Khalfan, M M & Swan, W (2004), An Exploration of the Relationship Between Trust and Collaborative Working in the Construction Sector, *Construction Information Quarterly*. [URL](#)
3. McDermott, P & Khalfan, M M & Swan, W (2005), 'Trust' in Construction Projects, *Journal of Financial Management of Property and Construction*, 10(1), pp.19 - 31. [DOI](#)
4. Khalfan, M; McDermott, P (2006) Innovating for supply chain integration within construction; *Construction Innovation*; Vol. 6 Iss: 3, pp.143 – 157. [DOI](#)
5. Dickinson, M., McDermott, P & Platten, A. (2007), Implementing Policy through Procurement: A Longitudinal Case Study Investigation, *Journal of Construction Procurement*, Vol13, Number 1: May ISSN 135-9180
6. Barrett, P (2007) Revaluing construction: a holistic model; *Building Research and Information* Volume: 35 Issue: 3 Pages: 268-286 [DOI](#)
7. Oyegoke, A.S., McDermott, P. and Abbott, C. (2009) Achieving sustainability in construction through the Specialist Task organization procurement approach, *International Journal of Procurement Management*, Vol 2, Nr 3 p 288-312. [DOI](#) (REF 2)
8. Oyegoke, A.S., McDermott, P. and Dickinson, M. (2010) The myth behind integration in the UK construction industry, *International Journal of Procurement Management* Vol 3 No 3 pp. 247-264. [DOI](#) (REF 2)

Key grants

9. **2001:** EPSRC Innovative Manufacturing Initiative - Construction as a Manufacturing Process- *Trust in Construction: Achieving Cultural Change in the Construction Sector GR/N33942 C18102* - £110,000.
10. **2001:** EPSRC Innovative Manufacturing Initiative - Construction as a Manufacturing Process, *Integrating the Supply Chain - A Critical Study of the Impact of Changes in Clients Methods of Procuring Professional and Contracting services*. £130,000
11. **2002-2007:** EPSRC Salford Centre for Research and Innovation in the Built and Human Environment (SCRI). An Innovative Manufacturing (IMI) Research Centre - £3M.
12. Renewal of the EPSRC contract until **2011** - EPSRC – Salford Centre for Research and Innovation in the Built and Human Environment (SCRI) (2007- 2011) Investigator, SCRI extension, with G. Aouad (PI) , P Barrett, R Cooper, M Kagioglou, J Powell, J Tah, V Ahmed, M Sexton, Y Rezgui, G Cooper, P Sterry, £4.3M
13. **2013:** EPSRC and ESRC KTP with B4Box, total eligible costs £124,153

4. Details of the impact (indicative maximum 750 words)

The impact of *Procuring Social and Economic Value through Construction* follows a process of partnership working with and adoption by practitioners and policymakers:

- Guiding progress towards sustainable construction practice, generating wider social and economic benefit through better informed construction procurement:
 - Revaluing Construction (RC): The RC conceptual framework was used by the Government of the Netherlands in 2008 and the Malaysian Government in 2009 to assess progress in their national improvement schemes for construction.
 - McDermott was a member of the development team for *BS 8534, Construction procurement policies, strategies and procedures Code of practice*, which responds to industry demand for consistency in the way construction work is procured and in the engagement of the supply chain in the project decision making process. *"BSI strongly believes that the construction industry will benefit from the introduction of a high level best-practice framework in this area."* [British Standards Institute](#) [a]
- Improving the performance of existing construction projects and businesses and commercialising new products and support services to construction clients and suppliers:
 - McDermott worked in partnership with UK local authorities to establish frameworks arrangements; specifically embodying clients' values of training, apprenticeships and local employment into the procurement and management processes:
 - The integrated supply chain work and ERDF funding enabled Salford to work with over 70 clients, including 80% of Local Authorities in the North West, supporting £2,500m of construction and design work procured (to 2009): [A Decade of Delivering Excellence in Construction](#) Report.
 - McDermott was commissioned as an independent advisor in the development of the NW Construction Hub, led by Manchester City Council. The North West Construction Hub is a move away from lowest price tendering, replacing this with long-term, collaborative relationships between clients, professionals and contractors, formed around shared objectives and common values.
 - To mid 2013, the North West Construction Hub has delivered over 140 projects to 53 clients with a value of £800m. The Hub manager described the presence of Salford as a 'golden thread' throughout the journey, and that their knowledge, experience, mentoring and support *"has been undoubtedly fundamental to our success."* [f]
 - The procurement work is supported by two related services. Firstly, the development of the Key Performance Indicator Engine, an on-line tool developed with Constructing Excellence, and used by over 150 organisations, generating over £200K in related licence fees, consultancy and training, enabling the ongoing performance measurement of organisations within these frameworks. Secondly, McDermott et al have developed a local economic multiplier methodology which enables the wider economic and social value to be calculated for the projects procured through the NWCH, and other projects.
 - KTP with B4Box (2013 to 2015) – B4Box is an SME construction contractor that has training and social value as its core values. This project was designed to systemise and enumerate B4Box's proven success in construction excellence and social impact to gain new contracts and further improve the current competitive advantage. [h]
- Informing public policy through a range of impacts - most recently the Government Construction Strategy and the Infrastructure Cost Review (and Implementation). [b]
 - McDermott was the independent academic for the latter, and was invited to remain on the joint steering group when the Government merged the two strategies in January 2012.
 - The Government Construction Strategy (Cabinet Office, May 2011) called for a radical change in public sector construction procurement. [c]
 - Objective 10(i) of the Government Construction Strategy requires the Cabinet Office to assess *"the effectiveness of frameworks, in collaboration with Departments and the*

National Improvement and Efficiency Partnership (NIEP) for Construction". The Strategy notes at section 2.38 that there is a plethora of construction frameworks in the public sector with varying degrees of quality: "Evidence and commentary from a spectrum of clients and contractors point to the highly effective use of some frameworks, but also to other frameworks which are less effective". [d]

- The work to assess the Effectiveness of Frameworks, in discharging that Strategy objective, was directed by a Working Group drawn from [Task Group 1 – Procurement and Lean Client](#), co-led by McDermott, with representatives from the Cabinet Office, Hampshire County Council, the National Efficiency and Improvement Partnership for the Built Environment (NIEP), the Civil Engineering Contractors Association (CECA), the Specialist Engineering Contractors Group (SEC Group), Kier, Partnerships for Schools, HM Treasury, the Department of Health, the Ministry of Defence, Environment Agency and the Ministry of Justice. The authorship was led by the University of Salford. [g]. Public sector organisations in England are now required to take account of the report in their procurement decision making. The Scottish Government is now also building it into their procurement decision making. [e]

5. Sources to corroborate the impact (indicative maximum of 10 references)

- a) British Standard: BS 8534 Construction Procurement, (2011 published), British Standards BSI Committee <http://www.placenorthwest.co.uk/achieving-best-value-through-construction-procurement-the-new-british-standard-bs-8534.html>
- b) Treasury – Infrastructure Cost Report – Infrastructure UK – December 2010 <https://www.gov.uk/government/publications/infrastructure-cost-review>
- c) Cabinet Office, Construction Strategy - Efficiency Reform Group, the Effectiveness of Frameworks Treasury/ Office of Government Commerce - *2005-2015 Construction Demand/Capacity Study* - Office of Government Commerce, National Improvement and Efficiency Partnership (NIEP) for Construction/ Government Construction Strategy [Report of the Procurement/Lean Client Task Group](#) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61157/Procurement-and-Lean-Client-Group-Final-Report-v2.pdf
- d) Scottish Government - Report of the independent review of procurement in construction carried out by Robin Crawford and Ken Lewandowski. **Tuesday, October 22, 2013 ISBN: 9781782569930** <http://www.scotland.gov.uk/Publications/2013/10/2688/7#>
- e) BIS – Industrial Strategy: government and industry in partnership, Construction 2015 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/210099/bis-13-955-construction-2025-industrial-strategy.pdf

Individual users/beneficiaries who could be contacted by the REF team to corroborate claims:

- f) Procurement Manager, Corporate Services, North West Construction Hub/Manchester City Council
- g) Head of Market & Suppliers, Construction, Cabinet Office/Office of Government Commerce
- h) Managing Director, B4Box