Developing a 'Best Value' Approach to Public Sector Construction Procurement

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ABSTRACT

This research focuses on the concept of 'best value' when perceived from the perspective of the public sector client. In the case of 'best value' in the business enterprise, 'best value' is that which returns greatest value to the business enterprise's shareholders. However, in the case of the public sector, 'best value' is more complex. Anecdotal evidence suggests that the use of non-price criteria in the

procurement process is desirable, but that it has proved to be somewhat difficult to come to terms with dealing with non-price criteria in practice. Public sector procurement officers face the requirement to make auditable and publicly defensible decisions. This research therefore seeks to develop a rigorous

'best value' framework for public sector construction project procurement with a view to piloting the

framework.

Keywords: Public Sector, Construction Procurement, Best Value

BACKGROUND

The Egan Report 'Rethinking Construction' (Egan, 1998) investigated the UK construction industry

and recognised the overwhelming need for change. The 'Executive Summary' describes the concern

that the whole construction industry is underachieving. The industry is described as having low

profitability, investing too little in research & development, and training, whilst having too many

clients dissatisfied with overall performance. The report proposes to initiate a movement for change in

the construction industry, for radical improvement in the process of construction (Egan, 1998). This

movement will be the means of sustaining improvement and sharing learning. The public sector is

described as having a vital role to play in leading the development of a more sophisticated and

demanding customer base for construction. Kenley, London and Watson (2000) advocate the role of

the public sector client as a catalyst for improved performance in the Australian construction industry.

The Egan Report (1998) also recognised that the contribution that the management of technology,

rather than technology itself, had made to improving efficiency and effectiveness in other industries,

and this appeared by and large, to have passed the construction industry by. The developments in the

management of technology in the 1970s and 1980s resulted in the overwhelming success of Japanese

manufacturing industry with quantum leaps in quality improvement and the reduction and elimination

of waste (Martinich, 1997, p.751). This, in turn, gave rise to the so-called 'Toyota Production System' now more commonly known as 'Just-in-Time' or JIT. JIT would not have been achievable without the quantum leap in quality improvement that preceded it. In part, this resulted from a 'rethinking' of the role of purchasing or procurement in the manufacturing enterprise. The pre-JIT approach had been to seek tenders from multiple suppliers and select a number of vendors to supply at the lowest possible purchase price (Martinich, 1997, p.762).

Post-JIT there was recognition that, when the performance of the procurement function was judged on how cheaply raw materials supplies could be obtained, an optimal output for the purchasing function almost inevitably produced a very sub-optimal outcome for the business enterprise as a whole through holding inventories, excess capacity, etc. Once it was recognised that, in order to optimise the outcome for the business enterprise, costs other than the purchase price of the raw materials had to be accounted for, significant focus was placed on the elimination of waste of all descriptions. That included the holding of unnecessary inventory on a 'just-in-case' basis. The outcome was that a 'systemic view' was taken of the business enterprise, rather than the view of an agglomeration of several different independent free standing mono-discipline functions. It was recognised that 'best value' for the business enterprise was seldom achieved by optimising the operation of individual subunits (Martinich, 1997, p.767-769).

RESEARCH QUESTIONS

This research seeks to address the various meanings that have been associated with the concept of 'best value'. It seeks to interpret those meanings and develop a Procurement Framework based on those interpretations. The research seeks to answer the following research questions:

□ What does 'best value' mean in the context of a public sector construction procurement agency's perspective? How does this differ from a private sector perspective?

□ Can a 'best value' framework be developed that is rigorous, robust and capable of withstanding the scrutiny of independent external audit?

LITERATURE

Defining Quality and Value

Multiple definitions of quality have been described in the literature (Reeves and Bednar, 1994, pp.419-420; Garvin, 1988, pp.40-41) of which the value-based approach has been one. Feigenbaum (1991, p.9) believes that quality is the combination of being best for customer use and this is balanced with selling price. Feigenbaum (1991, p.9) espouses an approach linking a definition of quality to value perceived by the customer, considering price to be an important component in assessing whether a product was a quality offering. Juran (1988, 35 E.6) also acknowledged the financial approach by viewing value as being equal to quality divided by cost (value = quality / cost). The work of Feigenbaum (1991, p.9), Juran (1988, 35 E.6) Reeves and Bednar (1994, pp.419-20) and Garvin (1988, pp.40-41) illustrates how the concepts 'value' and 'quality' have been interwoven in the literature.

Porter (1985, p.) focuses on the customer/users perspective of value and defines value as the amount buyers are willing to pay for what a firm provides. Walters and Lancaster (1999) state that value is:

determined by the utility combination of benefits delivered to the customer less the total costs of acquiring the delivered benefits. Value is then a preferred combination of benefits (value creation) compared with acquisition costs.

Walters (1999) believes that value and competitive advantage are compatible with each other. Walters (1999) states that:

A value strategy involves identifying, producing and delivering the combination of price and non-price related benefits the customer is seeking.

Exploring 'Best Value' in the Public and Private Sectors

Feigenbaum's (1991) 'value for money' definition of 'quality' acknowledges the combination of being best for customer use, and the importance of selling price. Best value would appear to be providing the most 'value' as assessed by the user. Price would appear to be a factor in determining what is 'best value' but not the only factor. Akhlaghi (1996) notes that:

the attainment of value for money in the procurement and provision of services is a global, corporate pursuit with increasing complexity and sophistication.

Attaining best value would appear to be achieved through the procurement of services that best meet the needs of the organisations' stakeholders. Clearly, in assessing 'best value' it is necessary to take account of the different contexts organisations exist in. A private sector client procuring a retail contract to sell its products will use a different set of criteria to determine whether they have received value than a public sector client would in a defence contract. As the context changes so do the factors influencing the perception of value. Any definition of best value needs to be context specific and must be flexible to take account of the clients' perspective.

Dalrymple, Hilmer, Karney, Edgeman, and Geroy (1999) state that in the business enterprise, the pursuit of profit is fundamental to the reason for existence. They acknowledge that this has been tempered more recently by the introduction of such concepts as the 'triple bottom line' that acknowledges that there may be environmental and social imperatives which must be taken into account in the pursuit of profit. However, they state that the fundamental role of the business enterprise is to maximize value for shareholders. In the case of 'best value' in the business enterprise, 'best value' is that which returns greatest value to the business enterprise's shareholders.

The emphasis of 'value for money' has led people to one way of conceptualising 'best value', but this does not always help in the public sector where not everything is assessed solely in terms of financial

return on investment. Return on investment in the public sector is frequently multifaceted and consequently, more difficult to assess. Donnelly (1999) highlights the complex nature of the public sector suggesting that the purposes and actions of government transcend direct service provision to embrace broader societal aims.

These differing reasons for existence mean that, in the case of the public sector, 'best value' is more complex. Governments are held accountable by a wider community of stakeholders/citizens than business enterprises. Governments do not exist to return profits to shareholders. Donnelly (1999) states that most public sector services were originally conceived in response to the failure of the commercial or private sector to deliver adequate quality in key areas for the well-being of the society as a whole. Donnelly (1999) cites:

Society's demand for top quality water and for a safety-net health service helps halt and prevent the spread of disease. Provision of high standard public housing for citizens contributes to the eradication of the squalor of slums. Systems for the universal education of children underpin the development of a civilised society. Public agency intervention protects the environment from the bi-products of modern industry and society.

Donnelly's (1999) examples all illustrate public sector concern with quality issues - all of these make a difference to the quality of people's lives. So quality in the public sector domain is not a new phenomenon, but traditionally has been a response to quality problems or failures. The attention of modern public sector organisations has been concerned more recently with ensuring that the services they themselves deliver are as good, as responsive, as consistent and as fair as possible in meeting public needs (Donnelly, 1999). Thus in linking the concept of 'best value' to the procurement context of an organisation, the reasons for existence of that organisation or entity must be taken into account.

The introduction of Best Value in the Public Sector

The concept of 'best value' has been introduced in a number of jurisdictions throughout the world in a public sector context, most recently as an umbrella term to replace the discredited 'Compulsory The concept of 'best value' has attracted varying Competitive Tendering' (CCT) process. interpretations in different jurisdictions (UK, Scotland, Victoria: Australia and the USA). Rees and Gardner (2003) suggest that 'best value' in the UK can be seen as tackling the embedded culture of local government. Curry (1999) stated that the intention of the 'best value' regime was to replace CCT with the intention of still retaining the competitive element over the compulsory element, whilst Wisniewski and Stewart (2001) felt it was more than just a simple replacement for CCT. Bovaird and Halachmi (2001) describe the introduction of 'best value' as a very high profile initiative and state that the meaning of best value has to be negotiated locally by local authorities, working together with their local communities. Scotland has further developed its approach through an agreement between two major political parties to improve public services and tackle the real issues that matter to people in Scotland, regardless of which party is in office (A Partnership For A Better Scotland: Partnership Agreement, 2003). In Victoria, best value has required local governments to demonstrate that they are providing value to the communities they serve (Best Value Victoria, 2003). Gransberg and Ellicott (1996) describe the goal of best value procurement methods in a US context is to:

combine the twin goals of promoting efficiency of private construction contracting and taxpayer trust in the procurement process.

Whilst there has been a lot written about 'best value' and its development, particularly in the UK (Curry, 1999; Jaconelli and Sheffield, 2000; Bovaird and Halachmi, 2001; Wisniewski and Stewart, 2001; 2004; Sheffield and Coleshill, 2001; McAdam and O'Neill, 2002; Rees and Gardner, 2003) there is still no precise definition of 'best value'. It has been an evolving concept and in each case, there is a lack of prescription relating to what might constitute 'best value'. 'Best value' was not

clearly defined and, consequently, there is a great deal to consider when addressing 'best value' in construction project procurement.

Outsourcing in the Public Sector

Governments are increasingly looking to partnerships with the private sector as a means of delivering services to the communities they serve. Hall (1998) notes that governments world-wide have sought to increase the involvement of the private sector in the delivery of public services. Hall (1998) describes initiatives ranging from outright privatisation of previously state owned industries (e.g water, gas, electricity), the contracting out of services previously undertaken by government employees (e.g refuse collection) or the use of private finance in the provision of infrastructure (e.g Public Private Partnerships). Domberger and Jensen (1997) comment that whilst privatising and contracting out are used synonymously in the public sector, they are different:

Privatisation refers to the transfer of ownership of physical assets from public to private ownership. Contracting out, on the other hand, means opening up to competition a set of economic activities which were previously immune from it.

Domberger and Jensen (1997) describe two principal arguments about contracting; those that take a public policy perspective and those that focus on the underlying economics. The public policy includes the role of government, problems of accountability, and issues concerning citizens' rights whilst the economic perspective considers market competition for contract yields, costs involved with contracting and market failure costs.

Domberger (1998, p.35-36) suggests that organisations evaluate their core activities and core competencies when deciding what they buy or make. Further, Domberger (1998, p.3) believes that the success of outsourcing initiatives lies in two key strategic choices made by organizations. The first strategic choice is the location of the organizational boundaries, in terms of deciding what the organization should produce itself and what it should contract out. The second is the structure (nature)

of the organisational relationships. The nature of the organisational relationships has been recognised as being important in construction for helping the supply chain to work in a coordinated manner to create value for clients (Walker and Hampson, 2003). Walker and Hampson (2003) describe the boundaries between parties in construction contracting, and the impact this has on the nature of the relationship between parties involved. They advocate structuring the boundaries in ways that create conducive environments for good relationships.

Domberger and Jensen's (1997) review of previous research in the area suggests that contracting out can yield efficiency gains. However, they acknowledge that there is debate as to whether these results represent wealth transfers through the reduction in wages and salaries of staff or genuine productivity gains.

Construction Procurement

Van Weele (2002, p.16) comments that procurement is a somewhat broader term than purchasing and includes all activities required in order to get the product from the supplier to its final destination. Quayle (2006) proposes a broad definition of procurement:

purchasing, contracting, and logistics, wherein logistics is taken to be inventory control, warehousing, transport, quality assurance and control.

The traditional approach to the procurement of construction projects is described as involving separate contracts between the client and the structural/civil engineer and between the client and the contractor/builder (Ngowi, 2000; Heisse, 2002; Walker and Hampson, 2003, p.13). Walker and Hampson (2003, p.13) describe this approach as involving discrete design development, tender, contract award and construction delivery phases. Procurement of construction projects in the public sector can be performed either as a single stage procedure or as a two-stage procedure Waara (2004). Waara (2004) states that:

In the single-stage procedure, all contractors are allowed to submit tenders on a construction contract. In the two-stage procedure the buyer usually distinguishes between prequalification and final selection of contractors.

Walker and Hampson, (2003, p.14) state that the traditional procurement method often ends up delivering the tendered lowest price for a project and subsequent claims for additional works means that many clients feel at the mercy of contractors seeking opportunities to create profit and additional revenue. Kenley et al., (2000) comment that the construction industry has been dominated by procurement methods that encourage short-term competitive behaviour, driven almost solely by price competition. The main criticism of the traditional approach has been that it invites a confrontational approach over disputes arising out of contract variations and what might be a fair price for these (Walker and Hampson, 2003, p.14). Waara (2004) suggests that the low-bid paradigm has led to little process innovation.

Recent attempts to define construction procurement reflect the changing and expanding nature of the scope of this important process in realising projects (Walker and Hampson, 2003, p.1). Walker and Hampson (2003, p.1) comment that a more comprehensive view of procurement has emerged over the past decade and describe it as a holistic and relationship-based view of procurement.

Male (2002; cited in Kelly, Morledge and Wilkinson, 2004, p.14) describes the construction industry as currently undergoing major change, much of that driven by regular-procuring clients. Male (2002; cited in Kelly, Morledge and Wilkinson, 2004) comments that there is a clear determination by policy makers at all levels in the industry that things have to change.

Public Sector Construction Procurement

Kelly et al (2004, p.159) believe that construction projects are an outcome from an organisation's strategic management process. As such they require aligning with the corporate and or business unit's

missions and objectives to achieve value for money. Kelly et al (2004, p.162) presents the project value chain as being the link between the organisation's strategic management process and the project as an outcome of that process. They describe projects taking place with the strategic direction of the client's organisation and being linked to a company's ongoing strategic direction. Further, they discuss the role of construction projects in creating value for the organisation and how this process is linked to the strategic direction of the organization (Kelly et al., 2004, p.159-162). Kelly et al. (2004) view value creation as being linked to an organisation's strategy. This suggests that any definition of best value must take into account the organisation's context and this is linked to its reasons for existence.

Quayle (1998) describe procurement in a manner similar to that described by Martinich (1997, p.767-769) post-JIT. Quayle (1998) details one element of strategic procurement as the development of single sourcing which implies a closer working relationship with suppliers in an effort to sustain value for money. Quayle (1998) recognises that there may be tactical benefits from encouraging cooperation/partnership approaches with suppliers to encourage a high performance as regards delivery and quality. One element of procurement strategy, therefore, involves decisions about when multiple or single sourcing should be adopted (Quayle, 1998). The pursuit of 'best value' requires the elimination of unnecessary waste in the supply chain and recognises that if the construction supply chain is performing sub-optimally then a public sector client cannot be procuring 'best value'. For public sector clients the need for transparency and accountability underpins the procurement process. The manner in which the public sector interacts with its supply chain via the tender process has caused Dalrymple, Boxer and Staples (2006) to wonder if the procurement process adds costs to both the client and the supply chain without proportionate addition of value. If public sector clients are procuring construction projects in this way then it is unlikely they will be obtaining 'best value'.

The manner in which the public sector procures via the tender process has caused Dalrymple, Boxer and Staples (2006) to wonder if the process adds costs without value.

Quayle (1998) suggests that the impact of procurement in government procurement units is driven by the contribution of the function to overall corporate performance (e.g. the government's reasons for existence). Quayle (1998) suggests that whilst much has been written about procurement strategy, research has not focused on the actual impact of procurement strategy on corporate performance in the UK government.

Conclusions - Best Value

The evidence from other environments (e.g private sector) and other jurisdictions (UK, Scotland) is that 'best value' regimes can be used, but they must be flexible rather than prescriptive and they require to be matched to the environment in which they are used. In the public sector the use of 'best value' regimes in an individual environment is then sufficiently described and detailed to enable the system to be audited by an external auditor. The development and use of 'best value' approaches in local government provides a prima facie case that a 'best value' regime for public sector construction project procurement can be developed. Furthermore, the fact that such systems are auditable indicates that a robust, transparent and defensible 'best value' regime that enables non-price criteria to be incorporated in the construction project procurement environment can, in principle, be developed and, for public sector procurement officers.

Expected Outcomes and Significance

The potential implications for the industry and the community of the successful completion of this program of research are extremely profound. The successful implementation of the 'best value' framework for public sector construction procurement will enable public sector organisations to advance several of their policy objectives through the procurement process, whilst retaining the defensibility and transparency of the process. This is the way in which the public sector client can genuinely drive innovation in the complex environment of the construction sector. The success of this

research will benefit the construction industry and in particular public sector procurement agencies, purchasers of construction works, and those involved in other types of major purchase.

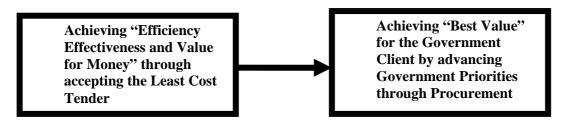
APPROACH - DEVELOPING A FRAMEWORK

The operational definition that has been developed for an approach to best value in Australian public sector construction project procurement is:

Best Value in a Public Sector Construction Procurement context is achieved when the outcomes of the procurement process are at worst neutral in their effect on other government policy intents.

Clearly the intent of Best Value Public Sector Procurement is to not undermine any other government policy intents. Whilst procurement of construction projects is closely linked to the policies and strategies within Government it is not the sole reason for Government existence. Government exists for the broader reasons explored above. Whilst Government does not exist solely for the purpose of procurement, construction has the potential to contribute to the achievement many government objectives. Governments are typically large purchasers of construction projects. The Victorian 2006-07 budget contains a commitment to \$4.9 billion for infrastructure projects, and a total of \$12.6 billion to be spent over the next four years (The Age, 2006). The Queensland 2005-06 State Budget contained approximately \$8 billion dollars to be spent on capital works (Queensland Government 2005). This buying power gives Government clients significant leverage in the market and significant influence in attempting to drive change initiatives through the construction industry. The envisaged procurement role change by the public sector client is described in Figure 1.

Figure 1: The Procurement Role Change

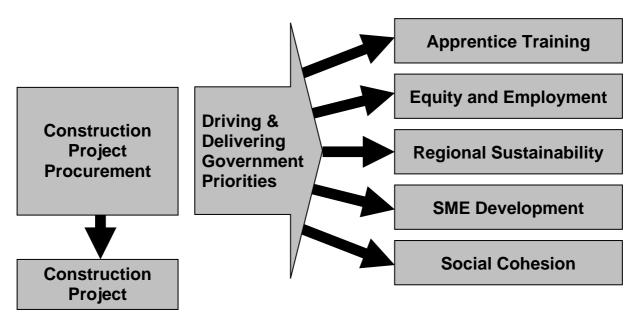


There is the potential to leverage support for other government objectives through incorporating those other government objectives in the best value framework. Best value in the public sector in UK, US and Australia has been descriptive rather than prescriptive. Guidance has contained descriptions of the elements that best value should contain but not prescribed any one way of achieving it, and has acknowledged that best value can take many forms. Using the above definition of best value presents opportunities to leverage the following benefits from the procurement process:

- ☐ Change the rules (genuine innovation)
- □ Deliver more than just construction projects to the community
- □ Culture change in the industry
- ☐ Trickle down effect to subcontractors

The 'best value' framework is based on identifying the strategic intents of a government entity and deriving from those tangible outcomes that relate to the strategic intents (see Figure 2).

Figure 2: Outcomes for the Public Sector Client



The outcomes that are being sought will vary depending on the context. For example, the outcome being sought may involve social inclusion, equity and employment opportunity for indigenous people as a result of a construction project being carried out in Regional Queensland. It may also seek to support the economic and social sustainability of regional businesses as part of the government's sustainable regions agenda. These outcomes would be accommodated in the best value framework for this particular construction project procurement brief. Contractors would respond to the brief indicating how they would address the additional criteria and provide numerical values for example detailing the number of indigenous people who would be employed and the proportion of the value of the contract that would be subcontracted to local firms. These values would be able to be audited and verified in the course of the contract with an element of the total value withheld until the outcomes are audited successfully.

CONCLUSION

This paper has sought to address the various meanings associated with the concept of 'best value' and provide evidence that a 'best value' approach to procurement could be auditable. It has also presented a skeletal overview of the proposed best value procurement framework. Future research will seek to describe the current practices of a public sector procurement agency with respect to *Lowest Cost Procurement*. It will then seek to further develop and pilot the Best Value Procurement Framework in order to evaluate the benefits. The further research will seek to address the following questions:

- Does the 'best value' framework deliver the desired 'outcomes' and impacts' for the Public Sector client? Does the 'best value' framework deliver better 'outcomes' and 'impacts' for the Public Sector client than the current approach to procurement of construction?
- □ Can the 'best value' framework be applied by other Public Sector clients? What can be learned from the pilot and evaluation to help the approach be applied by other Public Sector Clients?

Within such a framework, the provision of a robust decision making tool should enable public sector procurement officers to take account of non-price criteria in their decision making with a transparent approach to sharing the decision making criteria with the contractors seeking to secure the contract.

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