Current Issues in Public Sector Construction Procurement

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ABSTRACT

Infrastructure investment in roads and buildings accounts for over $30 Billion of Australian State Government expenditure annually (Government of SA 2007; Government of WA 2008; NSW Government 2007; Queensland Government 2007; Victorian Government 2008). As a result of this significant investment, the procurement process has the potential to deliver very significant payoffs for the community. Moore (1995) believes that public managers should be encouraged to be entrepreneurial and innovative so as to search for the most valuable use of the public assets and resources entrusted to them for deploying. This research presents a single case study of an Australian State Government organisation and explores whether the procurement process is viewed as an opportunity to deliver more than just a physical facility.

Keywords: New Public Management, Strategy, Contracting out

LITERATURE

Introduction

There is a growing comprehension of the importance of procurement in realising value for clients of all types (Walker & Rowlinson 2008; Walker & Hampson 2003). Public sector enterprises have a multitude of reasons for existence, and considerably more complex relationships with a wider range of stakeholders than the business enterprise (Giddens 1998; Donnelly 1999). Hence, creating value in the public sector domain is not as easily assessed as returning improved value to shareholders (Moore, 1995). Public sector procurement activities cannot be assessed solely on the basis of price, and are often focused on delivering narrow service outcomes in addition to achieving a set of broader outcomes for communities (Kelly, Mulgan & Muers 2002). Construction projects are an outcome from an organisation’s strategic management process, and as such, require aligning with the corporate and or business unit’s missions and objectives to achieve value for money (Kelly, Morledge & Wilkinson 2004). The public sector invests in physical assets (e.g. hospitals, schools, courthouses) to deliver the goods, services and symbols that society values (health, education and justice) (Winch 2002). However, the procurement process can also be viewed by public managers as an opportunity to create additional public value.
The Traditional Public Administration (TPA) paradigm has viewed politicians as solely responsible for defining public value and the role of public managers has been maintaining organisational performance in core operations (Moore 1995). More recently, the New Public Management (NPM) paradigm has placed an increased emphasis on; private sector management practices over policy making (Hood 1995), and the role of management in defining public value. Moore’s (1995) ‘Theory of Public Value’ states that the reason the public sector exists is to create public value and that the successful practice of public management should increase the public value produced by public sector organisations in both the short and long run. The Public Value Management (PVM) paradigm views both the elected representatives (politicians) and public sector managers as being involved in the definition and creation of public value. Therefore, the role of the public manager involves both managing up to a political (authorising) level and managing out to a consumer (citizen) level (Kelly, Mulgan & Muers 2002; Moore 1995; O’Flynn, 2007; Stoker, 2006). Moore (1995) believes public managers have been constrained as to their proper purposes and search only for more effective means to achieve their mandated purposes. However, this failure to appropriately capture the creativity of public managers results in the loss of a key ingredient that helps the private sector remain dynamic, responsive and value creating (Moore 1995). O’Flynn (2007) describes the public value approach as entailing considerable change as it provides a new way to think about government activity, policy-making and service delivery. Public value articulates a more proactive and strategic role for public sector managers who seek to discover, define and produce public value, instead of just devising means for achieving mandated purposes (Moore 1995).

**Developments in Procurement and Public Sector Management**

The traditional pre-Toyota (Just-In-Time) approach to procurement was to encourage price based competition in the supply chain, purchase at lowest cost, focusing on cost efficiencies for particular departments or agencies and less on the basis whole-of-organisation effectiveness. In the 1990s, the Australian public sector experienced a marketisation phase (O’Flynn 2007) under which value-for-money expenditure of Government funds was deemed to be achieved through Compulsory Competitive Tendering (CCT). This NPM influenced practice has many parallels with pre-Toyota
procurement, where little emphasis was placed on managing the supply chain. CCT did not deliver the desired financial savings, improved quality or continuity of service, and, as a result, Governments in a number of jurisdictions abandoned it in favour of Best Value (BV) (Bovaird & Halachmi 2001). In the UK and in Australia, BV legislation has required Local Governments to consult with their communities to negotiate the meaning of BV (Local Government Victoria 2004; Bovaird & Halachmi 2001). BV has sought to instill the spirit of continuous improvement and accountability into the public sector. The logic underpinning BV is consistent with Moore’s (1995) public value paradigm. Under BV, procurement practices are similar to that of a post-Toyota approach, under which price is not the sole selection criteria, and the supply chain is actively managed to produce value. O’Flynn (2007) believes that a more pragmatic approach to selecting providers to deliver public services creates more opportunities for the maximisation of public value and requires a more ‘joined-up’ approach from Government.

**Strategic Creation of Public Value via Construction Project Procurement**

Quayle (1998) comments that the impact of government procurement is driven by the contribution of the function to the overall performance, and research has not focused on the actual impact of procurement strategy on corporate performance in the UK government. Graycar (2007) suggests that policy makers are not well equipped to recognise or capitalise on the by-products of policy making. O’Flynn (2007) believes that public value requires a more joined-up, collaborative approach accepting that government activity must be interconnected and interdependent. Graycar (2007) comments there has been diminution of policy capacity, with more emphasis on management skills in an environment in which budgets are tight and focus is on ‘core business’. Designing contracts is very complex and requires public managers to make many public value laden decisions including a vendor’s obligations and tasks (Brown, Potoski & Van Slyke 2006). An approach to construction procurement based on lowest cost tendering will focus on the core business of building a facility but not creating additional public value as a by-product. So, instead of purchasing infrastructure at the lowest price, a public sector client might decide to spend more to achieve better whole-of-government outcomes. This
might involve advancing policy in a number or areas; pursuing regional development, local supply or vocational training policies by selecting building contractors who are more capable of engaging local small and medium-sized enterprises (SMEs) as subcontractors or suppliers, and or training apprentices or at risk long term unemployed. Graycar (2007) comments that what is notable in the area of tackling problems in the public sector are that the things that work best are often by-products of another policy or practice domain.

The Construction Supply Chain

Currently, the public sector in Australia undertakes little of its construction in-house and instead engages with the marketplace to harness the necessary skills and expertise. Dainty et al (2001) describe the construction supply chain as complex, having a main contractor at the centre of the hub, with links to the client, but then many subcontractors who are generally small and medium-sized enterprises (SMEs). In Australia, the construction industry employs some 709,300 people (ABS 2002). The supply chain is fragmented and it has been estimated that SMEs make up 99% of firms in the industry. The importance of the construction supply chain in creating value for public sector clients cannot be overstated. Due to the need for transparency, public sector construction projects have traditionally been subject to an open tender process and projects are awarded by clients on the basis of lowest cost, in which the contractor submitting the lowest bid wins the job (Palaneeswaran, Kumaraswamy and Ng 2003). However, rarely does the lowest bid end up being the lowest cost (Gransberg 1997; Gransberg & Ellicott 1996) with quality issues such as cost & time overruns, and defect issues often occurring (Walker & Hampson 2003). Further, this approach has frequently resulted in an adversarial and fractured working relationship between the client and contractor (Latham 1994; Kumaraswamy & Dulaimi 2001; Dainty, Millet & Briscoe 2001). Both the project-oriented processes of construction and the fragmented nature of the subcontract industry have contributed to these tensions (Dalrymple & Bryar 2006). 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 (Egan 1998; Kenley, London & Watson 2000). However, findings from the UK indicate that the relationship between the government and clients was perceived to be rigid,
adversarial, and contained wasteful duplication (Holt & Rowe 2000). Respondents felt leadership was lacking from the public sector client side. The literature in the construction supply chain management area calls for improved relationship quality between team members in project delivery systems (Walker & Rowlinson 2008). Increasingly the public sector in Australia has moved towards a two stage model involving prequalification in order to be registered and able to bid on government tenders. The top 5 prequalification criteria particulars found from recent survey results by Palaneeswaran, Kumaraswamy & Zhang (2001) were 1) past experience, 2) past performance, 3) finance, 4) quality concerns, 5) organisation and management systems. Wong, Holt & Cooper (2000) note that public sector clients are more compelled to select the lowest price due to public accountability, although it is not always the only selection criterion. Scholars describe procurement approaches moving away from selecting contractors on the basis of lowest cost towards approaches considering multiple selection criteria (Gransberg 1997; Kashiwagi & Byfield 2002; Palaneeswaran et al 2003; Wong et al 2000). Gransberg (1997) describes quantifying non-price criteria (qualitative data) by ranking each category against the other proposals and assigning weighting criteria to each category. Palaneeswaran et al (2003) describes an approach where non-price criteria are quantified into equivalent dollar values but portrays it as a difficult task involving a great deal of subjective assessments.

Transaction Cost Economics – The Cost of Tendering

Walker & Rowlinson (2008) state that at the heart of any procurement is a make-or-buy decision. When deciding to outsource, a firm will contract with another organisation and there will be costs involved in this transaction (Fill & Visser 2002). Williamson’s (1975) research built upon Coase’s work on the boundary of the firm and quantified the cost of transacting (Williamson 2005). The transaction cost associated with procuring construction occurs on both sides; the public sector client and the contractor bidding for the tender. The client costs are contained in activities such as the preparation and assessment of tenders and the administration of prequalification or supplier registers. Palaneeswaran et al (2003) reports that pre-bid contractor selection tasks such as certification, prequalification, short listing to an optimum number of bidders/proposers are potentially significant
in contributing to the ultimate best value. The 1992 Giles NSW Royal Commission investigating construction found that the cost of tendering on the contractor side is significant. For a relatively complex $20 million infrastructure project where the design and schedule of quantities is provided, it has been estimated (Dalrymple, Boxer & Staples 2006) that the cost of tendering is in the region of 0.5% value of the contract for each contractor tendering. Thus, in case where there are six contractors bidding the total cost is 3% of the contract’s value, or $600K. This does not include the costs to the subcontractors or suppliers further down the chain of supply.

DATA COLLECTION
The single case presented in this paper is part of a larger multiple-case study research project (Yin 2003, p.40) in which ten public sector agencies with infrastructure procurement responsibilities were investigated. Interviews were conducted with four highly experienced project managers responsible for procuring construction projects (see Table 1) from a centralised State Government works agency. These managers were selected using a purposive sampling logic (Cavana, Delahaye & Sekaran 2001, p.263) designed to gather rich and meaningful data about the operational activities of how construction procurement is undertaken, as opposed to a policy perspective on how infrastructure is procured by their organisations. Open ended questions were designed to explore a range of issues including; how procurement is undertaken, the use of non-price criteria, selection of sub-contractors, Value-for-Money (VFM), and government priorities. Interviews were transcribed, coded and analysed in NVivo in accordance with a content analysis approach used to open and axial code the data into themes (Cavana et al 2001; Richards, 2005).

RESULTS AND ANALYSIS
How do Australian State Governments procure construction projects?
Construction works are procured by a specialised internal delivery agency on behalf of client departments. Client departments are not tied to using the delivery agency, and do have the option of engaging a private sector project management firm. Regardless of whether client departments are
using the internal delivery agency, there is overarching legislation and policy guiding the process of how construction can be procured.

And now everything is fairly tightly prescribed within that as to how agencies procure projects. It gives some strong guidance on the sorts of procurement that match their risk profiles, the scale of their projects, the time and so on, and it's much more tightly controlled than it used to be. The guidelines are mandatory for these client agencies – Interviewee B.

Large projects are normally procured centrally in the state capital as that is where the expertise is but smaller projects are often procured by regional offices.

The offices through the state and the regional offices look after a lot of those small projects (under $20 million) – Interviewee A.

Tenders are generally either open bid for projects of low value and complexity where bids from suitably pre-qualified consultants and contractors are received, or select tenders for projects of higher value and complexity where a number of pre-qualified consultants and contractors (generally 4-6) are invited to tender. Pre-qualification requires consultants and contractors to submit a range of information about their business (finance, insurance, people, and track record) to government for assessment. When successful this allows them to bid on government projects.

What criteria are used by Australian State Governments when selecting building consultants and contractors?

When awarding tenders both price and non-price criteria are used for the selection of both building consultants and contractors.

Typically, we used price and non-price criteria. Typically we've used criteria such as the recently (introduced) resource strategy and methodology – Interview A.

The primary one is the quality of the team proposed and the track record in that sort of work, both the firm and the team. I mean they’re the key things - Interviewee B.

We evaluated the non-price criteria. Where the differentiation comes in, particularly in the current climate, is resources, the quality of the resources, because they are all competing with each other for resources. Human resources. – Interviewee C.

Non price criteria tend to be used more on large projects and attract a higher weighting on those projects as compared to smaller projects that tend to be awarded far more on the basis of lowest price.
I can’t exactly remember what the percentage was but usually we have 75 percent pricing or 70/30. At the end of the day price actually probably came into it more - Interviewee D.

**How do public sector managers select contract types and selection criteria?**

When a client department uses the internal delivery agency then the project manager responsible will develop recommendations on the contract type, selection criteria and weightings in consultation with the client department. The project managers go through a risk assessment process on the project and determine the best procurement approach. The project manager will also discuss the approach chosen with colleagues in the delivery agency. The recommendations developed are then submitted to an internal committee within the delivery agency for endorsement before the project can proceed.

I would discuss it with the client, what they thought about it. I'd discuss it with colleagues, what they thought about that as well, and so it's a process of getting it together first so when you put it on the table, you can give it a shot. The final approval is the committee to say that's right, you've got the right selection criteria, you've got the right weightings, and it's okay to go. So the process in place is to get it all lined up, so it's ready, get the contracts committee to say they endorse the process, and then go to the client and say can we go to tender and then we go to tender – Interviewee A.

**How are sub-contractors selected on public sector construction projects?**

The selection of subcontractors is left to the head contractor on Government projects.

You can get best value for money, if you hand the risk over to the managing contractor for actually selection and engagement of these without involvement and endorsement of the client. So, now, basically the contractors go out to their preferred subcontractors and engage them – Interviewee B.

He nominates the sub contractors which we, I suppose, note. If we have a violent objection to a subcontractor, then we will make our feelings known but in general the subcontractors nominated are reasonable subcontractors - Interviewee C.

Even when the public managers have had bad experiences with sub-contractors proposed by a major contractor they are reluctant to get involved in the selection decision.

**To what extent is purchasing Value-for-Money (VFM) an objective for Australian State Governments?**

All respondents indicated that purchasing VFM was an important objective of their work.

It is a huge objective – Interviewee D.
Oh, ultimately to me, it’s the objective, I guess the whole processes is geared around value for money – Interviewee C.

Because the public expect to get VFM, they not only expect to get it, they actually want to see we’re getting it too – Interviewee A

**What does Value-for-Money (VFM) mean to Australian State Governments?**

A strong financial or probity perspective on VFM was expressed by public managers when asked to define what VFM meant.

That you haven’t paid too much or too little for the product. You paid the right amount -Interviewee D

Being able to justify that they have paid the right price is an important element of public managers demonstrating VFM to both clients and the public.

We put the Quantity Surveyors (QS) all over their proposals so that we made sure there weren't anomalies in the people they were proposing, with the rates - Interviewee B

Effective expenditure of money. I mean, we are always having to justify to our clients that the cost of projects (is reasonable) - Interviewee D.

The project managers were cognisant of their client’s perspective of VFM and conscious to consider the whole-of-life costs involved with the built asset.

It depends on the brief from the client, and based on that brief we’re going to balance capital against whole of life, and once we’ve got that to where that should be we should get the best possible balance of capital – Interviewee A.

Using competition in the procurement process in addition to evaluating both price and non-price criteria was also viewed as an important component of achieving, and being able to demonstrate VFM.

A competitive tender, you’ve got a fairly good return tool so you get value for money given the current climate and economic climate, market. You tend to establish the best value for money through your evaluation of the tender, which is done on non-price and price – Interviewee C

Multiple perspectives of VFM emerged from the interview transcripts reflecting the complex, multidimensional nature of public value. The difficult thing for public managers is taking the decision to spend extra money, and moving away from the lowest price route and still being able to demonstrate that they have delivered VFM.
We had scored them, the three submissions, without seeing the prices, and then the quantity surveyor comes in and reveals the price to us. Before he reveals the price to us, we were assessing the non-price criteria and this guy is - we got to the point saying, well, this guy is really good and the other two are nowhere near as good. God, I hope these guys aren't too high a price, otherwise we won't get the good guy, we'll get the bad guy, but on the other hand, maybe it's better value. If we pay more money to this guy, we might get a better result but how much more do we have to pay for this better guy? - Interviewee A.

To project managers tendering projects to the lowest price bidders represents the easiest procurement route to demonstrate VFM to both taxpayers and politicians. This perhaps explains why price is the dominant theme emerging in any definitions of VFM offered by the public managers.

**Is there a link between Australian State Governments procurement and government priorities?**

The link between built assets and government priorities is a case made by the client department to Treasury when applying for funding.

The choice of project is really set by agencies outside ours. We're project managers. A client asks us to deliver something. We don't really question to a great extent. Well, the Department probably does in its broader covenant perspective, but as a project manager, I don't question whether this is a good project. I mean, obviously, if it's an absolutely appalling project, you wouldn't work on it – Interviewee C.

The link between the procurement process and articulated government priorities is not explicit.

To some degree I'm not sure whether the priorities are still in place – Interviewee A.

But I mean, yes, they exist. Yes, they're recognized for what they are as political promises and political initiatives. However, they're still recognized as valuable and desired aspirations, and generally the industry complies as far as it's able - Interviewee B.

There are examples where government priorities, in the form of non-price criteria, are built into contracts as standard ways of operating.

The ones that actually do have the most focus for us are the local industry participation and the training. Those are the two main ones that we get involved with – Interviewee A.

Local industry participation would generally be 5-10% of selection criteria - Interviewee C.

However, projects are not strictly audited against the government priorities, and so the project managers are somewhat skeptical that the contractors will actually deliver these government priorities.
The priorities have to be incorporated into each contract. I mean, they are a mandatory thing, and the contractors now have quite standard, sophisticated, ways of responding to it. Our clauses are very standard in terms of training, local procurement etc. Some contractors try harder than others to respond. Others will just pay lip service to things like local procurement. - Interviewee B

The physical location is a large factor in influencing a project manager’s thinking about the value creation potential of a construction project. If projects are located in indigenous or regional areas then project managers are likely to incorporate non-price criteria that seek to advance government policy in those areas.

**Do Australian State Governments get a whole-of-government approach to Procurement?**

Project managers procure construction projects on behalf of client departments who are generally focused solely on the contribution the built asset can help them make to government priorities. For example, if Health is building a hospital their attention is on the services that can be delivered from that hospital once it is built. These services contribute to government priorities within the domain of health, who are the main client when procuring a hospital. However, what client departments do not always see are the opportunities to leverage construction projects in to creating public value and achieving government priorities in other domains.

They're not interested in apprentice training. I mean, corrective services are interested in getting prisons built - Interviewee A.

They haven’t had anything like that focus (Ecologically Sustainable Development (ESD)) up until the last 12 months when water has become such a big issue for government – Interviewee D.

But, there is a return for the client, but there's also a return for society, in terms of environmental benefit – Interviewee B

**Conclusion**

Construction projects provide public managers with considerable scope to create public value, both services delivered from the physical asset and via the procurement process. This Australian State Government organisation is acutely aware of the importance of procuring VFM. However, the organisation views VFM from a narrow financial perspective, albeit incorporating whole-of-life costing, but none of the Managers defined VFM broadly in terms of delivering outcomes or
achieving government priorities. They felt that taking the decision to spend additional money, even where it produced commensurate value, was more difficult to justify. Whilst aware of the organisations’ operational role in creating project value through shaping procurement approaches, selection criteria and weightings they also felt that other parts of Government influenced the value that could be created from a project. In particular, treasury’s role in the budgetary process and client preferences shaped the value creation opportunities encapsulated in any construction project. The organisation is cognisant of some additional public value creation opportunities the procurement process presents. The efforts to standardise some non-price criteria into contracts is an attempt to build in some additional benefits into the way projects are procured, but the approach to auditing projects against delivering non-price criteria is far from as rigorous as it could be. Further, there is very little active management of the supply chain undertaken by the client organisation, with the supply side largely left to organise itself. The prequalification system is somewhat underutilized in the contribution it makes to both the management of the supply chain and minimisation of tendering costs on both sides. Project managers defined VFM narrowly in financial terms and are focused on the creation of value within client department domains rather than viewing the procurement as a process through which considerable value can be added for the whole of government. The organisation is predominantly focused on delivering what Graycar (2007) called core-business, optimizing procurement for client departments as opposed to outcomes for government as a whole. This is somewhat reminiscent of pre-Toyota approach to procurement. The evidence suggests that project managers are not relentlessly pursuing value creation opportunities via the procurement process and hence not acting as entrepreneurially or innovatively as Moore (1995) advocates. The evidence suggests that Governments are not delivering the type ‘joined-up’ approach to construction procurement that would create public value in a range of policy domains.

REFERENCES


**Table 1: Interviewees**

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<th>Interviewee</th>
<th>Age (&lt;35; 35-49; 50+)</th>
<th>Educational Background</th>
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<th>Years experience in Procurement</th>
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