Enhancing value for money in public procurement of Northern Ireland construction projects

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Gary McArdle and Dr Joseph Gunning evaluate public procurement in Northern Ireland - specifically, the achievement of value for money in public construction projects; they also assess other factors detrimental to creating value, such as sub-economic tendering and the potential impact of Brexit

A new road, water main or sewer may need to be constructed to a required specification; there is less impetus for innovation, whereas the construction of a new hospital or school may be considered complex and more open to radical innovation.
Abstract

The purpose of this article was to evaluate public procurement in Northern Ireland (NI) – more specifically, the achievement of value for money (VfM) in public construction projects. Other areas assessed were factors detrimental to creating VfM; sub-economic tendering; and the potential impact of Brexit in NI.

The methodology included primary and secondary data collection. The qualitative research involved six semi-structured interviews to collate the data and use of Decision Explorer to analyse it. Quantitative research was in the form of 81 questionnaire responses, analysed using SPSS.

The findings highlight influences which create VfM in public procurement, along with barriers to achieving VfM. Direct and indirect factors which contribute to public value are also established. Additionally, the potential impact of Brexit on VfM was ascertained.

The article identifies clear implications for practice, with a view of increasing VfM through public procurement procedures. An insight is provided into public procurement in NI from the perspective of both vendor (public bodies) and purchaser (contractors) – an area which appears to be under-represented in current literature.

Introduction

Procurement is the acquisition of resources required for the realisation of a project. These resources include contractors, consultants, subcontractors, suppliers and the client’s own resources.

Public procurement must be based on VfM, which is defined as ‘the best mix of quality and effectiveness for the least outlay over the period of use of the goods or services bought’.

This should be achieved through competition. Public procurement is subject to a legal framework which encourages free and open competition and VfM, in line with international and national agreed obligations and regulations.

There are sufficient strategic plans provided by NI public bodies on the delivery of infrastructure projects in an efficient manner while also providing VfM. There are a number of ways in which the procurement activities of public bodies can achieve VfM.

However, there appears to be a level of uncertainty as to the most suitable procurement approach. Additionally, there are factors inhibiting the creation of VfM such as lack of funding and long-term perspective; sub-economic tendering; and a claims culture.
Research methodology

The study used a mixed methods research approach by collecting primary and secondary data, utilising both qualitative and quantitative methods to collect, collate and analyse data. Figure 1 demonstrates the research process.

The qualitative research involved six face-to-face, semi-structured interviews with senior individuals currently working in the construction industry.

Four of the individuals work for public sector organisations, providing a range of perspectives from different specialisms.

Two of the individuals are senior managers within contracting companies currently involved in public sector projects in NI – one civil engineer and one quantity surveyor.

It should be noted that the interviewees appeared cautious with their responses due to the sensitive nature of the subject. Details of the interviews are illustrated in Table 1.

The analysis of the interviews also identified areas where further research would be required within the topic. This was used to aid the development of a questionnaire which formed the basis of the quantitative research.
A total of 81 individuals working across various sectors of the construction industry completed the questionnaire.

Research outcomes

This section identifies the main outcomes of the research and provides reasoning to the main themes established. Contradictions between different aspects of research in addition are also discussed. The main themes identified include:

1. Creating public value

Public sector organisations not only create public value through the services they provide; they also create value by their approach to the provision of services including:

- Creating employment;
- Supporting the local economy;
- Helping socially deprived areas;
- Support of SMEs; and
- Consideration and protection of the environment.

The main areas requiring improvement in NI include:

- Improvements to the road network;
- Greater employment opportunities;
- Improvements to the health facilities; and
- Improvements to the water and sewerage services.

Although it did appear that VfM was being achieved, the concept of measuring public value would provide a more appropriate assessment of the delivery of public procurement policies.
2. Factors which result in less VfM and have a damaging effect on NI’s construction industry

There are various factors and practices which are detrimental to the objective of achieving VfM through public procurement.

The ‘vicious circle’ in figure 2, illustrates the main causes which are damaging the construction industry in NI. It should be noted that this is more relevant for less complex projects.

Water and roads projects are less complex projects, whereas education and health are more concerned with large complex projects. The rationale is that a new road, water main or sewer may need to be constructed to a required specification; there is less impetus for innovation, whereas the construction of a new hospital or school may be considered complex and more open to radical innovation.

The three main causes of sub-economic tendering in NI are:

a.) The client’s aim to gain VfM places increased pressure on contractors to reduce costs;

b.) The attitude of contractors. Some contractors submit low tenders simply to win the work and offset losses by drawing on more profitable sections of the business. Additionally, legal challenges prior to contract award from unsuccessful tenderers are time consuming, costly and lead to delays in the contract start date.

Figure 2 The vicious circle damaging the construction industry in NI
c.) Lack of work in NI.

During the construction phase, contractors seek claims as an approach to increase income. The increase in claims is forcing the client to ‘fight back’ and apply the contract in a more stringent manner regardless of the contractor or tender price.

Therefore, contractors are not making enough profit or possibly losing money leading to a breakdown in relationships. There is no process improvement on defining the key aspects of the tender evaluation by the client, as contractors will continue to submit sub-economic tenders to win work – resulting in the cycle starting again.

This vicious circle is proving to have a damaging impact on the construction industry in NI for both contractors and clients. The competitive industry, lack of construction contracts and unsustainable rates are proving to be a dis-incentive to larger contractors who are focusing on expanding their geographical spread to gain profitable work.

In an attempt to break this cycle, a starting point would be to obligate public-sector clients to reassess their interpretation of VfM. It is apparent that they can confuse VfM with lowest price and their current approach to place more emphasis on cost is resulting in a ‘race to the bottom’ in relation to tendered rates. Clients must realise that the lowest price will not necessarily mean the lowest outturn cost.

Current regulations have a procedure in place to assess sub-economic tenders. However, clients are happy to receive reassurance rather than exclude them to avoid potential legal challenges.

As demonstrated in the case of DRD v BBMC (2016), BBMC were awarded damages because of DRD excluding them from the tender process based on their abnormally low tender (ALT). A potential change in regulations would give clients more authority to deal with ALTs without risking the backlash of a legal challenge.

Additionally, a reduction in funding provided by the government for capital works projects is resulting in greater operational and maintenance cost. Factors such as restrictions on expenditure along with a reluctance to incur higher capital costs are resulting in greater maintenance cost, suggesting a lack of long-term perspective by public bodies. This is providing a major problem to sustainable construction procurement.
3. Factors which create VfM and proposals for improvement

Figure 3 summarises what creates VfM, based on the qualitative and quantitative research.

There are certain differences within the findings of the research, particularly in relation to contract strategy for large complex projects. Health and education sectors have adopted a traditional approach for the large complex works such as the new critical care unit at Royal Victoria Hospital (RVH) or the relocation of Ulster University, Jordanstown (UUJ). In each case, the design and construction stages are completed and procured separately.

However, one question in the questionnaire focused on this area for large complex projects. Two-thirds of the responses indicated that design and build would provide the best opportunity to create VfM for the client. Possible reasons for this difference in results include:

- The details provided by health and education sector representatives divulge the procurement approaches for both the consultants who complete the design and specification and the contractors. The procurement of the consultants focuses more on quality with less emphasis on price. Design competitions and ‘narrow average approaches to the cost assessments avoid low cost tenders and ensure that the best consultant is awarded the contract.

- In contrast, contractors are ultimately procured on lowest price. Following a most economically advantageous tender (MEAT) process to determine suitable contractors, the client is confident that the contract is so well defined with necessary risk allocation, that they can accept the lowest bid.
There were several suggestions for improving procurement procedures within the public sector in NI including:

• It is apparent that there is greater emphasis towards price in the price/quality (PQ) combination with an almost default position of 60/40 or 80/20 PQ ratio. However, the client is not aligning projects with adequate PQ combinations. An improved balance in the assessment between cost and non-cost criteria at tender stage is required, depending on project complexity, risks, contractor availability and client’s objectives.

• Proposed changes to the current PQQ process. Figure 4 illustrates possible suggestions for improvement in the current process.

![](image)

- Figure 4 Suggested improvements to the PQQ process

• It is recognised that quality responses are generic. However, clients are not willing to put emphasis on quality since it is more subjective in nature compared to cost. Ultimately, this will result in a ‘race to the bottom’ in terms of cost.

• Frameworks are accepted as an approach to gain VfM as well as reducing the adverse nature of construction procurement, but they are not utilised enough. Frameworks lend themselves to greater specialism and better workmanship, further enhancing the VfM initiative. Additionally, they provide an opportunity to save on tendering costs; form long-term trusting relationships; and improved design and delivery. Benefits to the contractor include a greater security of work through long-term programmes. However, it is acknowledged that frameworks may not be beneficial to SMEs.

• Greater leadership and planning are required to ensure procurement approaches are fair and reasonable and to reduce procurement turnaround times.
4. Brexit

Following the June 2016 referendum and triggering of Article 50, Brexit and its potential impacts is a very current topic. One of the most significant concepts is that Brexit will have a detrimental impact on public works in NI.

This includes fewer foreign contractors coming to NI for work following Brexit. Most of those who responded to the questionnaire were concerned about the potential impact of Brexit on their current work.

To support this, the main outcome from the research was ‘great uncertainty’ over future budgets a result of Brexit. NI already receives a low level of funding from the government. This is not likely to improve following Brexit.

Contrary to this, health sector personnel believe that they could potentially receive more funding in the future. However, they could not make this claim with any certainty.

Public bodies receive a certain level of funding for capital works projects and this is likely to continue following Brexit. However, current funding provided for by the EU for projects involving both NI and ROI is not likely to continue.

Another potential project at risk is the proposed York Street interchange project. The £165 million project is part of a Euoroute E01. A substantial EU contribution of up to 40 per cent could now jeopardise the project.

The consensus is that procurement policies will not change apart from how work is advertised. If it does change, the principles of competition and transparency will remain since the WTO principles would apply.

Depending on the new agreement on how the UK will operate within the EU market, a forum to advertise public works may still be required following Brexit. It is noted that the current approach to advertising in OJEU can be time consuming for little benefit.

It is recommended that the threshold levels for public works are reviewed. In several cases, the values are deemed too low. Although certain works are advertised in the EU market, ultimately it will result in local contractors only tendering for the work.

5. Future funding recommendations along with proposals for year-end flexibility

The current process for funding provided by the government is an annual budget. To create better VfM along with greater security to companies, a better foresight of budget is called for. This would allow companies to improve measures such as more permanent staff and improved training.

Year-end flexibility would be a benefit to clients and contractors. The current process of an annual budget is putting the client under pressure to spend money, particularly towards the end of the financial year.

A lack of planning on the client’s behalf is ultimately putting increased pressure on the contractor to complete the work in tighter time frames.
Recommendations

The study undertaken has potential applications to industrial practice. An insight was gained into the area of public procurement in NI.

The outcomes should be considered by the public sector to enhance VfM from the services that they deliver, in a clear and transparent process.

Due to the sensitive nature of the subject and the cautious responses received through the interviews. Further study could include Freedom of Information Requests for more objective data on relevant public bodies and projects.

The impact of Brexit on public procurement in NI and the wider United Kingdom could be further examined as the current process is based on the EU directive on public procurement.

Public bodies must realise that in order to enhance VfM, more rational thinking at an early stage into aspects such as their objectives, project complexities, project briefs, and budget forecasts, will be required.

Greater leadership and planning by the government and public sector organisations would remove pressures which lead to unsustainable tendering and would help maximise VfM for clients.

In addition to this, it would encourage more cost-effective working practices, greater innovation, better supply chain engagement and improved security to contractors.

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