Insight into contractors’ competitiveness at Most Economically Advantageous Tenders in the Dutch construction sector

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Abstract

Increased application of Most Economically Advantageous Tenders (MEAT) in the Dutch construction sector changes contractors’ tender processes. They are no longer requested to execute fully specified projects for the lowest price, but contractors are asked to come up with solutions themselves. This offers new opportunities to compete at tenders. Therefore the applicability of insights from three theories has been researched to increase the understanding of competitiveness at MEAT tenders: two generic theories related to firms’ competitiveness - Porter’s positioning theory and Barney’s resource-based view - and the construction specific emphasizes on the process of organizational learning. The applicability has been researched by means of semi structured interviews within a major Dutch construction firm. The generic theories become more relevant due to new differentiation opportunities. Construction specific characteristics remain nevertheless intact, causing the importance of organizational learning to remain just as relevant.

Keywords: Most Economically Advantageous Tender, Construction, Competitiveness

1. Introduction

Dutch public authorities award infrastructural works’ increasingly according to the award criterion ‘Most Economically Advantageous Tender’ (MEAT) (Bouwer et al., 2006, VROM, 2009). This implies that tender bids are evaluated, by means of pre-specified criteria, on value in addition to price. Requirements, determining a minimum level, must be met and in addition freedom is given to contractors to develop solutions to meet client’s desires. This enables contractors to differentiate on more than price only. Traditionally, projects were solely tendered out with the award criterion ‘lowest price’ (LP).

No literature has been found by the researcher that addresses competitiveness at MEAT tenders. Nonetheless, many schools of thought on firms’ competitiveness exist. Two leading strategic theories are frequently applied to the construction sector: Porter’s competitive positioning school (CPT) and Barney’s resource-based view (RBV) (cf. Betts and Ofori, 1992, Gann and Salter, 2000, Green et al., 2008a, Green et al., 2008b, Lu et al., 2008). However, the applicability of these theories to the construction sector has been criticized due to sector’s specific characteristics. On the other hand, literature addressing the construction...
sector identified organizational learning as the key process to increase performances and competitiveness. However, it is unknown how insights from strategic theories and organizational learning apply to MEAT tenders. Therefore, this paper explores the applicability of two strategic strategies – competitive positioning theory and resource-based view - and organizational learning.

Insights into competitiveness were derived from the different points of view first. Subsequently, the applicability of these insights has been assessed by means of semi-structured interviews at a major Dutch contractor. The semi-structured nature of interviews suited well the explorative character of the research (Baarda et al., 1996). Interviewees represented various layers of the project organization and they had experiences with various MEAT tenders.

In this paper, the functioning of MEAT tenders will be explained first (2). Subsequently, the discussion on competitiveness at the construction sector, as identified in literature, is presented (3.1). Based hereupon and because of changing market conditions two strategic strategies and one process theory are selected to gain insights into competitiveness at MEAT tenders (3.2). Subsequently, the research’s results on the relevance of insights into competitiveness are presented (4). The article concludes with the key findings and recommendations for further development of MEAT tenders by increasing opportunities to compete (5).

2. Functioning of MEAT tenders

MEAT tenders enable value based procurement at tenders, introduced to European legislation in 1993 (EC, 2002). However, it has only been applied frequently in recent years. Today’s EU legislation on public work tenders, directive 2004/18/EC, allows the award of a contract to be based on two award criteria only: ‘lowest price’ or ‘most economically advantageous tender’ (EU, 2004). Besides award criteria, the directive distinguishes selection criteria. These enable selection of contractors, based on their financial and technical capability to complete the project, which makes it possible to exclude parties at an early stage before bids are being prepared (Lambropoulos, 2007).

In addition to price, MEAT tenders take in account performance and quality criteria (RWS, 2006):

- Price criteria have a direct relation with price, e.g. the tender price.
- Performance criteria are expressed performance units, which can be directly translated into a monetary value. E.g. shortening the project duration with 5 weeks à € 20,000 per week, results in a MEAT value of € 100,000.
- Quality criteria are valued by scores or mutual comparison among the bids.

The final score of a bid can be expressed in a monetary value, score or value-price ratio. The monetary value is most common in the Dutch construction sector (Dreschler, 2008). For this, scores on value criteria (performance and quality criteria) are expressed in monetary scores, resulting in fictive discounts for good performances on value criteria and penalties for poor performances. Monetary scores are used to calculate the virtual tender price by deducting the tender price with discounts and penalties (RWS, 2006). The bid with the lowest virtual tender price gets the contract awarded (see Figure 1).
3. Insights into competitiveness at the construction sector

In order to gain insight into competitiveness at MEAT tenders, the discussion on competitiveness at the construction sector has been addressed first. Based hereupon, two leading generic theories on firm’s competitiveness are selected: Porter’s competitive positioning theory and Barney’s resource-based view. In addition, construction specific literature, that emphasizes the need of organizational learning, is addressed to realize performance improvements and increased competitiveness.

3.1 Literature’s discussion about competitiveness

Many attempts to apply the competitive positioning theory and the resource-based view to the construction sector have been made. Interpretation of their applicability differed however (cf. Betts and Ofori, 1992, Gann and Salter, 2000, Green et al., 2008b). This is among other things a consequence of hindrances to apply these theories to the construction sector. Betts and Ofori (1992) mentioned 5 reasons why opportunities to apply concepts of competitive strategies in the construction sector are limited (Betts and Ofori, 1992, p. 523-524):
- Little opportunity to differentiate, since many project parameters and variables are determined before the firm is engaged.
- Economies of scale are not very relevant, since the construction sector is highly fragmented.
- Projects are unique and few construction firms have a structured feedback system causing the importance of ‘previous experiences’ to erode.
- Existence of low entry and exit barriers because much construction works, especially at the small-firm and low-technology end, is relatively simple and the rate of technological change is relatively slow.
- The management intensive nature both stimulates and hinders the application of strategic planning. Because of the high number of day to day and on site decisions, management is the determining factor of the capacity and capability of a construction firm.
Additionally, Green et al. (2008b) criticize the leading theories, competitive positioning and resource-based view, on their limited applicability to the construction sector. They argue that it is “mostly used as an explanatory tool and fails to provide meaningful prescriptive guidelines for managers in the construction sector” (Green et al., 2008b, p. 429). Green et al. (2008a) describe it more severe by stating that CPT and RBV are “riddled by tautologies and ambiguities” (Green et al., 2008a, p. 427). Green et al. (2008b) observed furthermore a stagnation of the understanding of competitive strategies in the construction sector. They ascribe it to some part to the fragmented nature of this research field.

Green et al. (2008b) opt rather for dynamic capabilities. This are learned and stable patterns of collective activities through which the organization systemically generates and modifies its operating routines in pursuit of improved effectiveness (Zollo and Winter, 2002, p. 340). The dynamic capability can be seen as an extension of the resource-based view. Whereas RBV sees knowledge as a source of competitive advantage, dynamic capabilities emphasize the importance of the learning process (Green et al., 2008b, p. 429). This is why they attach great importance to organizational learning and knowledge management (Green et al., 2008a). Information and knowledge sharing is advocated to develop the right capabilities. Barney et al (2001) respond to literature opting for dynamic capabilities and organizational learning from the RBV point of view. According to them, the dynamic capabilities view fits within in the resource-based view. Namely, they argue that dynamic capabilities are ‘capabilities that are dynamic’ (Barney et al., 2001, p. 630). It is thus just a type of capability, similar to any other capability that could potentially result in competitive advantages (Barney et al., 2001).

Dynamic capabilities’ strong emphasizes on organizational learning corresponds with much construction specific literature. Herein a widespread agreement has been identified about the importance of organizational learning. This is a result of many sector specific barriers for information sharing and knowledge deployment, while on the other hand knowledge is considered as one of the most valuable assets of construction firms. Therefore, many authors stretch out the need to improve organizational learning as the key way to improve performances and competitiveness (cf. Barlow, 2000, Dave and Koskela, 2009, Gann and Salter, 2000, Gielingh, 2005, Green et al., 2008a, Green et al., 2008b, Holt et al., 2000, Love et al., 2000, Zhang et al., 2009).

3.2 Competitiveness at MEAT tenders

The construction sector has changed rapidly and developments are ongoing. This relates among other things to the increased application of MEAT tenders and the correlated increased opportunities for contractors to compete on design and engineering. According to the researcher, this is likely to affect the suitableness of competitive strategies. Namely, in comparison with lowest price tenders, MEAT tenders offer greater opportunities to differentiate and are mostly applied at relatively large and technological complex projects. In addition, feedback systems can increase the importance of previous experiences. This causes some of the hindrances, to the application of competitive theories mentioned by Betts and Ofori (1992) (see 3.1), to erode.

On the other hand, barriers to information sharing and knowledge
deployment remain existent at MEAT tenders. Increased freedom is given to contractors at MEAT tenders to develop solutions themselves, which is why knowledge development and deployment affect competitiveness. Therefore, also the process of organizational learning is further taken in account to supplement the strategic strategies.

3.2.1 Competitive positioning theory (CPT)

According to Porter’s competitive positioning theory, the rules of competition and firms’ available strategies are for a large extent influenced by the market’s structure in which it is active (Porter, 2008, p. 3). The movement towards the application of MEAT tenders in the Dutch construction sector will thus affect available strategies. I.e. it offers greater possibilities to differentiate from competitors. Therefore, in theory all of Porter’s competitive strategies become applicable: cost leadership, differentiation and focus. Competition is no longer determined to take place on ‘cost leadership’ or ‘cost focus’, but ‘differentiation’ and ‘differentiation focus’ become options as well. For this, differentiation should be awarded by premium prices. In other words, the tactics of a tenderer can be aimed at the lowest price, best value for money or to optimize its strategy for specific market segments (focus). Porter suggests that the development of competitive advantages is most likely when a choice is made among the strategies. Otherwise, the chance exists to get ‘stuck in the middle’, which implies loosing ones competitive advantages. Attractive profits can only be gained, while being stuck in the middle, if the market is highly favorable or if competitors are in the same position (Porter, 2004, Porter, 2008).

3.2.2 Resource-based view (RBV)

MEAT tenders also enrich differentiating capabilities according to the resource-based view. Firm’s resources are ‘strengths that firms can use to conceive of and implement their strategies’ (Barney, 1991, p. 286). Barney (1991, p. 286) formulates competitive advantage as a firm’s implementation of a value creating strategy that is not simultaneously implemented by any current or potential competitor. This can only be realized if a firm has unique resources, since otherwise competitors would offer similar solutions. This suggests that much more resources can gain competitive advantages at MEAT tenders. Namely, they do not need to address the realization of the lowest price per se. Unique selling points, if asked for at tenders, enable contractors thus to gain competitive advantages.

3.2.3 Organizational learning (OL)

Gann and Salter (2000) relate organizational learning to the need to integrate business and project processes (see Figure 2). Business processes are ongoing and repetitive. It enables routines, which provides opportunities for standardization, performance improvements and innovation. On the other hand, project processes have a tendency to be temporarily and unique. The resources of the standing organization have the function to support projects. Vice versa, projects need to provide feedback to the core organization. To be successful, project experiences must be integrated in the continuous business processes to ensure the coherence of the organization (Barlow, 2000, Gann and Salter, 2000).
Integration of business and project processes is heavily dependent on information sharing and organizational learning. Projects’ alliances and interdisciplinary character complicate this. Knowledge must be transferred over the boundaries of firms and disciplines, which is the fundamental ingredient for alliances (Holt et al., 2000). However, in practice this is hampered by firms tending to retain information, crucial to system’s integration, in order to manage risks in their own sphere of control (Gann and Salter, 2000). The lack of adequate inter-organizational co-operation is one of the main reasons for problems in the construction sector (Barlow, 2000).

The importance given to information sharing is in line with many researches addressing the construction sector. According to Barlow (2000, p. 985) the coordination and integration of knowledge across organizations is critical for successful project delivery. Zhang et al. (2009) opt to establish knowledge management systems to avoid re-inventing the wheel and reduce redundant work. Reuse of information can reduce time spent on problem solving and increase quality (Dave and Koskela, 2009). Organizational learning is thus not just about sharing knowledge, since this remains often unused or ignored. It is about taking ideas through a lifecycle of feedback and refinement (Dave and Koskela, 2009, p. 896). Love et al. (2000, p. 108) defined it as follows: ‘If the industry is to improve construction organizations must integrate learning within day-to-day work processes, in such a way that they not only share knowledge and continuously improve, but also, operate efficiently and effectively in response to their changing environment’.

4. Contributions to insights into competitiveness at MEAT tenders

The applicability of the previous presented theories on MEAT tenders has been researched. The generic theories have become more relevant. However, some existing conditions hinder straight forward application of the strategic strategies. Furthermore, construction sector’s specific hindrances to knowledge development and deployment remain existent at MEAT tenders. As a consequence, organizational learning continues to be a key factor to improve competitiveness.

4.1 CPT: Market allows ‘stuck in the middle’

Interviews and analyses of tender outcomes reveal the application of two positioning strategies at MEAT
tenders: ‘cost leadership’ and ‘stuck in the middle’. The former seems to be the case with tender bids with substantial lower tender prices and minimal performances on value criteria. The latter, although described by Porter (2004) rather as a consequence, are tender bids that score well on both price and value criteria. These could also be outcomes of differentiation strategies. However, due to the market’s nature to focus on costs, it seems more likely that firms operate as ‘stuck in the middle’.

All interviews stretched out the importance to score well on both price and value criteria. The firm did not seem to aim for winning MEAT tenders with a cost leadership strategy. However, the importance of price was seen too important to apply a pure differentiating strategy. Namely, the benefits of good performances on value criteria were not sufficient to allow premium prices for differentiaion.

Various reasons were given to the limited amount of pay-off for differentiation at value criteria:

- Insufficient weight given to value criteria;
- Conservative judgment on value criteria, resulting in small differences in tender outcomes;
- Little differentiating opportunities on value criteria (e.g. if criteria favor to much a particular and obvious solution);
- Clients’ conservative demands due to unawareness about what the market can deliver.

Concluded can be that often MEAT tenders do not give sufficient freedom to apply a pure differentiation strategy. The market is momentarily rather in favor of what Porter describes as ‘stuck in the middle’. However, lowest price strategies have proven to be successful. Additionally, clients’ development of MEAT tenders is ongoing which creates increasingly opportunities to realize pay-off from differentiation at value criteria. Following the competitive positioning strategy, moving away from ‘stuck in the middle’ towards the differentiating strategy seems likely to become increasingly successful.

4.2 CPT: Distinguish between LP and MEAT

Construction firms are confronted with two kinds of tenders: lowest price tenders (LP) and most economically advantageous tenders (MEAT). LP tenders demand clearly low tender prices, while MEAT tenders demand also creation of additional value. Applying two different strategies simultaneously is rarely successful for firms according to the positioning theory. Only if a firm is able to separate two business units, each can pursue a different generic strategy (Porter, 2004). This suggests that a firm should tender according to a single strategy at all tenders or distinguish between LP and MEAT tenders. The latter requires two largely distinct business units, each focusing on a specific type of tender. In that case, the LP-tender business unit can aim at cost leadership, while the MEAT-tender business unit can pursue differentiation.

The positioning theory is unclear about how competitive strategies should be applied in a project-based industry. Many projects demand collaboration with various companies. This complicates the application of a positioning strategy. Either firms have to be selected with similar strategies to complement each other or the positioning strategy should be formed project specific. However, this conflicts with the competitive positioning theory, that argues to deploy all resources at a single positioning strategy.
4.3 RBV: Conditions to differentiate

Achieving competitive advantages in tender bids with unique (project-specific) resources, like advocated by the resource-based view, is a strategy that has proven to be successful. Contracts have been won with bids that scored best on price and value criteria. This means that the specific tenderer could execute a project significantly better than its competitors, assuming the project plans and prices were realistic. In these cases, firm’s resources could thus develop unique tender bids. However, the outcomes are project-specific and it is unclear if these resources contribute to sustained competitive advantages. Some resources and capabilities are likely to be applicable at several projects, like cost effective production methods. Others might have a one-off nature addressing unique aspects of a specific project. Differentiation can thus be realized with generic and project specific resources. The former can result in sustained competitive advantages, but prerequisites exist. They must not be easy to imitate by competitors. Furthermore, the application of resources or capabilities must be frequently valued at tenders, otherwise no competitive advantage can be gained.

Both prerequisites complicate the application of unique resources at MEAT tender bids. Public authorities aim at equal level playing fields at tenders, resulting in an ‘equal information for all policy’. This implies that solutions developed at tenders are communicated publicly. Additionally, intellectual property rights do not go automatically to the contractor, but often to the client. This hampers the un-inimitable character of a value creating strategy. Furthermore, sources of competitive advantages must be valued at tenders, which is often not the case. This could be because the client does not want to value it at a tender deliberately or because it is not aware of the possibility. However, even if a client is aware of a certain possibility, it might still not want to value it in a tender if it would favor a particular firm too much. This would disturb the equal level playing field, which is necessary for an effective tender process. Competition is namely needed to gain attractive bids.

4.4 OL: Hindrances to information sharing and knowledge deployment

The literature’s observations of hindrances to information sharing and knowledge deployment in the construction sector correspondents with the research’s findings. Inter-firm cooperation, one-off nature and uniqueness of projects hinder information sharing. Few formal information structures existed and ‘the wheel got frequently re-invented’. Construction specific literature, opting for organization learning to improve performances, seems to remain very relevant for the researched firm. Therefore, organizational learning seems to remain a process that contributes to competitiveness.

In addition, interviewees argued that knowledge stemming from old tenders is often limited applicable due to differing terminology used by clients. The essence of much criteria are however the same. The challenge lays therefore in specifying bids to the specific circumstances of a project. This is why problem oriented information mapping, as advocated by Gielingh (2005), seems to be a suitable solution to enable access and usage of information without significant efforts.

5. Conclusions

Because of the increased application of most economically advantageous tenders (MEAT) in the Dutch
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The increased application of MEAT tenders has created new differentiation opportunities. This makes generic theories, although formerly criticized, more applicable to the construction sector. The extent to which tenders enable rewards of differentiation by premium prices is however still limited. This could however serve to further improve the quality of construction projects. On the other hand, it might conflict with an equal level playing field creating the desired competition (by clients) on tenders. It is therefore recommended to further research opportunities to increase incentives for tenderers to innovate and deliver high standards without disturbing the necessary competition at tenders. For this, the manner in which differentiation gets rewarded at MEAT tenders plays an important role.

In spite of the increased relevance of competitive theories, construction sector’s specific characteristics remain intact. Therefore, the need to increase organizational learning remains as actual as with lowest price tenders. This is why it is important for contractors to manage organizational learning actively within their organization.

construction sector, generic competitive theories become more relevant. Tenders are no longer solely evaluated on price, which creates new opportunities to realize competitiveness.

All strategies of Porter’s competitive positioning theory (CPT) – cost leadership, differentiation and focus – become applicable. Cost leadership remains a suitable strategy, for both lowest price tenders (LP) and most economically advantageous tenders. Momentarily, the market seems to be in favor of ‘stuck in the middle’, which allows a simultaneous focus on price and differentiation to be successful. However, differentiation in itself is increasingly likely to become successful depending on the extent value is appreciated at tenders.

Applying a differentiation strategy to MEAT tenders would conflict with the necessary cost strategy at LP tenders. Therefore, according to CPT, a firm should focus on a single strategy or set up two largely distinct business units enabling the application of two positioning strategies simultaneously.

The relevance of Barney’s resource based view is increased as well by MEAT tenders. A much wider range of resources can contribute to competitive advantages since they do not longer have to address low costs per se. Nevertheless, some barriers remain to fully profit from firm’s unique resources:

- Application of resources must be valued at tenders;
- Project’s one-off nature hinders multiple application of capabilities;
- Too much of competitive advantages conflicts with client’s wish for an equal level playing field.

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