 ISBN: 9789052693958

CONTRACTOR ABILITIES TO DEVELOP COLLABORATIVE PRACTICES IN AUSTERITY TO MEET ENVIRONMENTAL SUSTAINABILITY AGENDAS

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Abstract *The boom era was characterised as continuous improvement in construction. Collaborative practices and a focus upon differentiation were primary features. The current market is austere with a primary focus upon cost. Survival is a dominant contractor strategy. Yet, certain contractors are retaining collaborative practices as a means to secure work, lever value and deliver effectively. Some have embedded collaborative practices as core competencies and dynamic capabilities that lever value in supply chains and networks. Environmental sustainability agendas are long-term and are likely to increasingly drive factors affecting construction in the future. Collaborative practices will be necessary to lever value to meet sustainability agendas early in the project lifecycle. Firms pursuing this path are likely to be the minority yet will be more successful by growing market share in the long run compared to the competition.*

Keywords: Collaboration, Competencies/Capabilities, Investment, Marketing, Survival

INTRODUCTION

How is the construction sector shaping and changing itself in the emergent economic era of austerity? To what extent will the resultant changes equip or constrain the construction sector to meet "sustainability" agendas over the coming years? The *aim* is to conceptually scope the ability to respond to future needs given recent and current responses during austerity. One *objective* is to evaluate the extent to which collaborative and partnership practices of the last 10-15 years provide a means to meet service and sustainability requirements in the future. A second *objective* is to evaluate the potential consequences for main contractors of low levels of investment motivated by survival during austerity.

Austerity is defined in terms of the consequences of economic downturn. It is evidenced as low levels of demand in the construction sector due cutbacks in investment from the public and private sectors. Most construction firms are primarily focused upon survival (El-Higzi, 2002; Skitmore et al, 2006; Skitmore and Smyth 2008). They keep their investment and overheads low; they keep capacity building and developing capabilities low. This is to maximise ability to respond to the "lumpiness" of demand at any time and the amplitude between the booms and slumps in the market (e.g. Smyth, 1985; Linder, 1994; Hillebrandt et al, 1995).

"Sustainability" is defined in environmental terms. Whilst definitions abound, this is conceived around current understanding as presented to industry, for example by the recent Morrell Report to the UK government (Morrell, 2010a). Collaboration is defined along two dimensions. The first dimension is the type of practices conceived in construction around so-called continuous improvement drivers, such as partnering the supply chain (Egan, 1998). In theoretical terms this is underpinned by relational contracting (Macneil, 1980; Williamson, 1985). The second dimension is the type of practices that emanate from investment within the

firms. The theoretical basis is core competencies (e.g. Hamel and Prahalad, 1996) and dynamic capabilities (Teece et al, 1997), which are embedded processes and abilities that go beyond the skills, expertise and professional disciplines that are essential to conduct a business. Examples of core competencies and dynamic capabilities might be organisational learning and knowledge management or the formal and informal routines established to conduct activities more efficiently and effectively. Collaboration can be a dynamic capability in itself to lever value from within mainstream operations, but can also act to lever value from another capability or core competency.

Main contractors tend to subcontract work. Leverage will typically be within a supply chain or industrial network (Håkansson, 1982; Håkansson and Snehota, 1995; Christopher et al, 1996; Skaates and Tikkanen 2003). Levering value is therefore largely a function of service provision rather than technology and production capability. This is why collaboration is important and requires capacity. There are two conceptual tensions. The first is between theoretically transitioning from relational contracting as a basis for collaboration, that is, responding to market and procurement drivers, to relationship management competencies and capabilities that are embedded in the firm. The lessons learnt from relational contracting may have become embedded as capabilities, but not automatically. This needs investment.

This paper explores the extent to which the demands ahead, especially around sustainability agendas, can be met in conditions austerity. Are collaborative capabilities being lost that may prove necessary in the future? The boom era was characterised by continuous improvement initiatives in construction, of which alliances, partnering, integrated teams were advocated as a major component of facilitating improvement (e.g. Egan, 1998). This type of collaboration was a move away from adversarial markets. There was a focus upon service differentiation (cf. Porter, 1985). In practice, initiatives largely fell short of original expectations. Improvements were generally project specific, but nonetheless improvements were made (Smyth, 2010a).

The current market is austere. It has shifted from being focused upon differentiation to one focused upon cost (cf. Porter, 1985). Cost savings and driving prices down are the primary client concerns (e.g. Morrell, 2010b; Smyth, 2010b). But that does not mean the capabilities for levering value across networks, especially through collaboration are lost? This needs exploration. At this point the conceptual case has to be explored in the light of limited available information beyond the anecdotal.

The paper undertakes this exploration by briefly reviewing the boom era of continuous improvement in construction. It considers the period of transition induced by the austerity of the slump market. It then considers the tension and balance between collaboration and low investment to conceptually gauge where the sector may be positioned for meeting sustainability agendas in the future.

THE ERA OF CONTINUOUS IMPROVEMENT

The era of continuous improvement was ushered into being within construction during boom times. It was conceived conceptually and in policy terms during the previous austerity period. Theories had been developed, such as lean production, and concepts were being applied in practice, such as supply chain management and partnering in other industries (e.g. Womack et al, 1990; Womack and Jones, 1996). Discontent, particularly amongst clients that had come to

expect added value when procuring other services and products, had been growing in construction during the early 1990s, as failure to meet minimal time-cost-scope/quality was common occurrence. Initiatives were emerging, for example through the Lean Construction Institute in the US, influenced by the work of Ballard and Howell (1988) in efforts to reduce waste and improve efficiency, and in the UK from the Latham (1994) and Egan (1998) Reports. Parallel influences in the UK were, for example, the work of Bennett and Jayes (1995; 1998).

A series of institutional arrangements were put in place in many countries, for example in the UK the Egan Report led to the Movement for Innovation (M4i) and Constructing Excellence as a successor to encourage and transfer 'best practice'. Collaborative practices were being advocated through client leadership, partnering the supply chain to improve innovation and performance.

There were early criticisms of collaborative approaches (e.g. Bresnen and Marshall, 2000; Green, 1999). Theoretical rigor was one; questioning how transferrable the measures were into asset specific supply was another; further criticism concerned the extent to which main contractors were committing investment or adopting the rhetoric to secure work and squeeze suppliers, and how penetrating successes were (e.g. Bresnen, 2007; Green 2006; Mason, 2008). A recent UK study considered 150 out of a total of 525 demonstration projects designed as exemplars of transferrable knowledge. Covering a 10-year period it was shown that more project benefits had accrued than strident critics suggested, yet have fallen a long way short of expectations, concluding:

> *…explicit knowledge has not been transferred beyond largely general descriptions of improvements. Although these descriptions may have stimulated other parties to try similar initiatives, there is insufficient description of what has been done and how it has been done in demonstration project write-ups to facilitate direct comprehensive knowledge transfer*. (Smyth, 2010a: 269)

Not only were lessons not being transferred between organisations, they largely remained project-specific in contracting organisations, that is, not being transferred through corporate investment to be embedded as core competencies and dynamic capabilities that go beyond the essential operational skills and expertise, nor embedded into contractor programme management. Furthermore, sustainability was a low priority in the early years of continuous improvement. Whilst it was coming to the fore in the mid-to-late-2000s, specialist consultants and subcontractors were the primary players rather than main contractors (Smyth, 2010a). Therefore, the role of main contractors was to lever value from the industrial network and supply chains. Value leverage is aided by collaboration (e.g. Beach et al, 2005; Kumaraswamy and Rahman, 2006; Anvuur and Kumaraswamy, 2008; Smyth, 2010a).

New tailored services could form the basis for developing core competencies and dynamic capabilities beyond the essential skills and expertise for operations. This could occur through teasing out generic skills and knowledge to be captured for widespread and repeated application. Some contractors took tentative steps, for example an increased strategic systems orientation in certain North American contractors (Zoiopoulos, 2011) and improved marketing capabilities to add service value (Chambers et al, 2009). The effectiveness of embedding such collaborative practices largely depends upon establishing new ways of doing things. This can be practically characterised as establishing formal and informal routines (cf. Nelson and Winter, 1982) that (a) improve the efficiency and effectiveness of mainstream

operations through collaboration by reducing transaction costs (cf. Williamson, 1985), and (b) lever added value through supply chains.

A PERIOD OF TRANSITION

The 2008 "credit crunch" changed a great deal. It ushered in austerity. The level of demand dropped and procurement drivers changed. Demand has shrunk. Where construction clients continue to buy, many have switched from demanding for service differentiation to a cost focus (cf. Porter, 1985). Some of the advocates of continuous improvement have made dramatic shifts, for example the UK supermarket chain Tesco has demanded a 30% price cut from all suppliers including consultants and contractors. The UK Government advisor on construction has also demonstrated how prices have risen (Morrell, 2010b), although an analysis of the extent to which the price rises have accrued as premium profits and/or added value is absent.

Cost drivers are likely to remain dominant short- and medium-term. However, there are two significant underlying trends. Some contractors are minded to retain collaborative practices. They have witnessed a shift in the culture, absorbed as informal and formal routines (e.g. Chambers et al, 2009; Smyth and Fitch, 2009). They perceive benefit in such capabilities for securing work from existing clients under conditions of intensified competition. This links to the second trend: sustainability. Its various dimensions are likely to increasingly drive factors affecting construction in and beyond the current era of austerity (e.g. Edkins et al, 2009; Morrell, 2010a).

Collaboration is an important part of main contractors meeting the sustainability agendas, yet UK projects where effective collaboration is sufficiently penetrating *"are still very much in the minority"* (Morrell, 2010a: 54). The UK case is not thought to be exceptional. What does vary between construction companies and national cultures is the degree to which strategic planning is applied. Madsen (1989) has shown that hands-on strategic planning and investment is necessary to be successful for business development and execution, especially in domestic and adjacent markets, for example the national and EU market for UK or Dutch contractors. UK contractors were less strategic than European counterparts and divested during the last recession, losing market share to European competitors (Stockerl, 1997; Stockerl and Smyth, 1998). Initial indications are towards a similar pattern emerging (Smyth, 2010b). The evidence overall points towards contactors that strategically plan and invest in capacity and capabilities are likely to be most successful in the long-term. This is in line with the resource-based view of the firm (Penrose, 1959; Wernerfelt, 1984), and in line with the theoretical subsets of core competency and dynamic capability theory (e.g. Hamel and Prahalad, 1996; Teece et al, 1997). Collaboration is part of this theoretical line of thinking and builds capacity for the future. In contracting the necessary investment to embed collaborative practices requires investment, which needs to be sufficient whilst not taking risks that threaten survival (El-Higzi, 2002; Skitmore et al, 2006).

What sort of collaboration is in evidence and what is needed to meet sustainability agendas in the future? Collaboration during the boom era was characterised by contracting firms leaving it to individual responsibility (Smyth and Edkins, 2007). Those firms that have embedded collaborative practices have established formal routines through systems and procedures, which guide individuals towards collaboration, around which new norms and informal routines are established that have a reinforcing role (e.g. Pryke and Smyth, 2006; Smyth and

Fitch, 2009; Gustafsson et al, 2010; Zoiopoulos, 2011). However, most main contractors have not made the transition from relational contracting to investment in core competencies and dynamic capabilities.

TOWARDS COLLABORATION OR UNDERINVESTMENT DURING AUSTERITY

As main have not invested in new developing capabilities, collaborative practices are largely residual. They are in evidence through individual behaviour or through informal routines that emerged during the era of continuous improvement. The residual routines of collaborative practices have the capability to help secure work for firms and meet sustainability as it affects construction internally, through supply chains and across industrial networks, as well as in relationships with clients to secure and execute projects. These may prove fragile because of reliance upon individuals and their behaviour. Effective collaborative practices will be those that are most effective for leveraging value, for example to meet sustainability agendas. They will systematically involve project managers, directors and business development managers that can identify needs and lever the value to develop win-strategies prior to and during the bidding process. Collaborative practices during execution will maintain the integrity of the win-strategy and deliver added value benefits to clients and other stakeholders. This may challenge some pre-conceptions that value is primarily levered during execution.

This value leverage is part of marketing, specifically relationship marketing and management (e.g. Grönroos, 2000; Christopher et al, 2006). Relationship marketing has become established amongst some contractors (Smyth and Fitch, 2009). This is part of the strategic project front-end (Morris, 1994). The front-end strategy for projects therefore enables commitments to be made through relationship marketing that adds value to the client and yields improved strike rates, especially for repeat business clients, for the contractor. Commitments are not merely about getting close to a client or suppliers in a business sense but about relationships that lever value. They become part of social capital that is transferred to the client asset (cf. Gustafsson et al, 2010). Commitments of internal resources and with alliance partners in the industrial network are thus made to create capacity and resources necessary to configure the project content and service. This is also the basis for making commitments to the client, which are subsequently embedded into the project in contractual terms and service promises. In this way added value of technical and service content is levered. The result would constitute a shift towards a greater service orientation, in line with what Vargo and Lusch (2004) call the service-dominant logic.

Whilst there is a strong theoretical base to support the argument, mapping out what this looks like on the ground is difficult for two reasons. First, core competencies and dynamic capabilities, such as collaborative practices, are configured in many forms. The different forms are ideally aligned to market segments and individual clients in ways to position a contractor from its competition. Second, sustainability agendas differ as will the substantive content of requirements.

However, there are strong drivers of survival in construction that result in minimising investment as noted (Hillebrandt et al, 1995; El-Higzi, 2002; Skitmore et al, 2006). To develop the point, there are three main problems from underinvestment experienced at the level of the firm:

1. Threats in the market from rivals that do secure a competitive edge through

investment (e.g. Stockerl, 1998; Smyth, 2010b).

2. Low investment carries a series of consequences:
    i. Constrained ability to carry risks, such as in public-private partnerships (e.g. Stiglitz and Wallsten, 1999);
    ii. Clients remain dissatisfied as provision fails to meet expectations and requirements because intensified competition exacerbates low investment (e.g. Stiglitz 1981);
    iii. Opportunism can lead to underinvestment in relationship-specific activities, such as collaborative relationships, and other social or human capital (e.g. Edlin and Stiglitz, 1995).
3. Inability to respond to fast changing environments (Morden, 1997; cf. Micklethwait and Wooldridge, 1996).

Therefore, whilst survival may be secured in the short-run, long-term growth is secured by contractors that invest for growth, particularly in the downturn and on the upturn. Such growth is typically characterised by growth in market share rather than profitability (Smyth, 2010b). The implications of growth is that firms that invest expand at the expense of those that underinvest, so short-term survival may lead to long-term decline or takeover.

CONCLUSION AND RECOMMENDATIONS

It has been argued that long-term success is derived from investment, a type of investment being dynamic capabilities or core competencies shaped as collaborative practices to lever value.

It has further been argued that sustainability agendas are likely to require investment and project specific commitments by contractors to secure work and satisfy clients. Whilst there may be several ways to achieve this, an obvious path is to switch from reacting to procurement drivers to proactive investment, particularly in service provision around relationship building and value leverage. However, there are strong drivers for survival amongst contracting firms that militate against this. Yet, evidence from the last recession shows that those that both invest and survive tend to be more robust and grow market share in the long-term. Sustainability agendas are likely to create similar opportunities in the market on the upturn from austerity.

It is probable that few firms are likely to pursue the path of investment in capability development and collaborative practices. This is likely to be due partly to the perceived risk and partly due to habit and cultural norms. The majority of main contractors may continue to set the primary goal as survival. Whilst this may work in the short-term, it weakens firms in the long-term in the face of competition from firms that invest. Moreover, low levels of investment render it difficult to respond to competitors that do invest and survive. They will grow market share. The implications for clients and society is that construction firms developing capacity will be best placed to provide a high quality service and meet the range of sustainability agendas in the future.

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