

ENACTING COMPETITIVENESS: AN EMPIRICAL INVESTIGATION

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The paper draws from three case studies of regional construction firms operating in the UK. The case studies provide new insights into the ways in which such firms strive to remain competitive. Empirical data was derived from multiple interactions with senior personnel from with each firm. Data collection methods included semi-structured interviews, informal interactions, archival research, and workshops. The initial research question was informed by existing resource-based theories of competitiveness and an extensive review of construction-specific literature. However, subsequent emergent empirical findings progressively pointed towards the need to mobilise alternative theoretical models that emphasise localised learning and embeddedness. The findings point towards the importance of de-centralised structures that enable multiple business units to become embedded within localised markets. A significant degree of autonomy is essential to facilitate entrepreneurial behaviour. In essence, sustained competitiveness was found to rest on the way de-centralised business units enact ongoing processes of localised learning. Once local business units have become embedded within localised markets, the essential challenge is how to encourage continued entrepreneurial behaviour while maintaining some degree of centralised control and co-ordination. This presents a number of tensions and challenges which play out differently across each of the three case studies.

KEYWORDS: competitiveness, embeddedness, localised learning, organisational structure, regional contractors

INTRODUCTION

Improving the construction industry's competitiveness has long been of interest to the international construction management research community. However, a systemic bias towards positivist and quantitative research approaches has led to a recurring fixation with attempts to define competitiveness and then to measure the underlying determinants as if they were objective characteristics (e.g. Flanagan *et al.*, 2007). Much of the existing literature draws from Porter's (1990) 'diamond framework' to compare and explain different countries' success in the international construction market (e.g. Ofori 2003). Unfortunately, such research is of limited relevance to firms which operate at a regional level within domestic

markets. Despite much-heralded trends of globalisation, the vast majority of construction firms remain rooted in localised contexts. Also, there remains a noticeable shortage of empirically-grounded research into the way in which competitiveness is conceptualised and enacted in real world situations. This paper draws from three case studies of medium-sized regional construction firms operating in the UK. The case studies aimed to investigate the ways in which regional construction firms strive to remain competitive. More specifically, on the basis of emergent empirical findings, the research sought to develop fresh insights into the enactment of competitiveness within regional construction firms. Initially, the most popular theories of competitiveness as currently mobilised within construction management are briefly reviewed and critiqued. Attention is also given to an alternative literature which links competitiveness to the notions of 'embeddedness' and 'localised learning'. The adopted case study methodology is then outlined prior to the presentations of three case studies of regional construction firms. Finally, a discussion is offered on the extent to which the research provides both new empirical insights and fresh theoretical perspectives on the competitiveness of construction firms.

UNDERSTANDING COMPETITIVENESS

Competitive advantage

Porter's theory of competitive advantage and his associated 'five-forces analysis' (cf. Porter 1980) are frequently used to discuss the competitive strategy of construction firms (e.g. Betts and Ofori 1992). The adopted perspective tends to view competitiveness in terms of how firms position themselves in the market place. Certainly Porter's competitive positioning school focuses primarily on the importance of exogenous factors. However, numerous commentators have criticised the concept of 'competitive advantage' in terms of its essential ambiguity and imprecision (e.g. Klein 2002). O'Shaughnessy (1996) also criticised Porter's work for its lack of meaningful advice on how firms should implement the adopted strategy. Certainly, Porter's work displays little interest in the contextualised processes through which competitiveness is actually enacted.

Resource-based view and dynamic capabilities

Notwithstanding the recurring focus on the importance of exogenous factors, there is also a need to be familiar with other theories that focus on endogenous factors. Particularly important are the resource-based view (RBV) (e.g. Barney 1991) and the dynamic capabilities school (e.g. Teece *et al.* 1997). The literature on RBV emphasises the firm-specific unique resources that enable firms to become competitive that cannot be replicated by others. De Haan *et al.* (2002) adopted this perspective in arguing that the performance of construction firms is determined by their core capabilities. It is also increasingly popular to focus attention onto the importance 'dynamic capabilities'. As an extension of RBV, the dynamic capabilities literature emphasises the ways in which firms continuously reconfigure their operating routines to enable responses to changing environments. In contrast to the static concept of RBV, the concept of dynamic capabilities is conceived as something a firm *does*, rather than something it *has*. For example, whereas RBV sees knowledge as a source of competitive advantage, the dynamic capabilities literature emphasises the importance of organisational learning. But here again, the RBV and dynamic capabilities literatures have not been exempt from criticism. Both literatures have recurring definitional problems regarding the distinctions between resources, routines, capabilities and competences (cf. Connor 2002; Zahra *et al.* 2006). The underlying arguments are further found to be

essentially tautological; the capabilities which make firms successful are those which account for its success. Dynamic capabilities are especially characterised by empirical elusiveness (cf. Green *et al.* 2008). The literature at large once again fails to offer practical advice to practising managers.

Localised learning and embeddedness

The lexicon of dynamics capabilities undoubtedly offers a useful focus in terms of encouraging firms to focus on the need to continuously re-adjust to changing markets, but the existing mainstream literature provides few insights into *how* such capabilities are enacted. During the initial stages of the empirical research, interviewees repeatedly emphasised the importance of relationships and the need to become established in localised markets. This resonated strongly with established concepts of embeddedness and localised learning within the discipline of economic geography. The concept of localised learning is promoted as a central component of regional competitiveness by economic geographers (cf. Maskell *et al.* 1998). Its underlying assumption is built upon the fact that economic and entrepreneurial activities tend to agglomerate at certain places and lead to patterns of national and regional specialisation. The notion of ‘agglomerations of related firms’ emphasises the importance of interactive learning between firms for the purposes of knowledge creation, which is considered as a key element in enacting competitiveness. Maskell *et al.* (1998) contend that a firm’s competitiveness is rooted in its localised capabilities, ‘which are difficult to imitate for outsiders, and which are partly based on intense interaction between a limited number of actors within a regional or national industrial system’. In short, localised learning is perceived as a learning activity that is embedded in a local or regional ‘milieu’, where the interactions between firms, customers, institutions and local authorities take place in a given location (Maskell *et al.* 1998). It is further argued that firms embedded in the right kind of milieu will tend to learn faster than others and hence become more competitive. Localised learning puts a strong emphasis on a collective learning process among a variety of agents, thereby enabling firms to create knowledge and consequently sustain their competitiveness. In other words, competitiveness is highly dependent upon the ways that firms embed themselves in local contexts and develop close relations with other local stakeholders. The localised-learning perspective extends beyond a single-firm focus into a collaborative-network view on the competitiveness of firms.

Similarly the literature on the concept of embeddedness also emphasises the importance of embedding in local contexts and the social networks that sustain competitiveness. Uzzi (1996) describes embeddedness as ‘an exchange system with unique opportunities relative to markets’ and claims that firms ‘organised in networks have a higher survival chance than do firms which maintain arm’s-length market relationships’. Jack and Anderson (2002) also contend that embeddedness is a process of becoming part of the structure through knowing players and rules within specific contexts in order to recognise opportunities that are contextual. In short, the central argument of embeddedness is that being embedded in specific local contexts, whether geographical locations or specialist markets, provides opportunities that are not accessible to those outside. The concept of embeddedness discredits generic and de-contextualised recipes for competitiveness. But embeddedness should not be presented as panacea. There are clear dangers in becoming ‘over embedded’, which can cause too much reliance on a limited number of relational ties with the overall vision becoming too entrenched.

The discourse surrounding localised learning and embeddedness puts a strong emphasis on social networks within local contexts. These are seen to directly shape and influence the

competitiveness of firms. Whilst the notions of localised learning and embeddedness can be viewed through different theoretical lenses, it is important to recognise that the two ideas are interconnected. To a large extent, localised learning can be perceived as the process of becoming embedded in local networks. Jack and Anderson (2002) emphasise that there is no ideal end-point for becoming embedded. Localised learning is therefore better understood as an ongoing *process*. In other words, firms remain competitive through a continuous process of localised learning that enables them to become embedded in localised markets.

RESEARCH METHODOLOGY

The adopted research methodology rests on a ‘becoming ontology’ (cf. Chia 1995) which views reality as something which is fluid and evanescent rather than something which is static. From this perspective, reality never stops in order to actually be, but is in a continuous state of *becoming*. The becoming ontology emphasises the importance of ‘action, movement, process and emergence’ (Chia 1995). The adopted approach therefore focuses attention on processes of enactment rather than any desired end state of ‘being competitive’. It is contended that such an ontological position provides an important fresh perspective on the way in which competitiveness is enacted within construction firms.

The adopted methodology also followed the principles of inductive case-study research, otherwise described as ‘iterative grounded theory’ (cf. Orton 1997). This comprises an approach whereby emergent findings are interrogated against a succession of theoretical models derived from the literature. In contrast to the conventional view of grounded theory, the iterative grounded theory disregards the possibility of engaging with empirical data in a ‘theory free’ manner. Emphasis instead is given to the importance of the researchers being *theoretically sensitive* as a result of being steeped in relevant literatures. Knowledge of the accepted literature of competitiveness shaped the initial research design, but emergent empirical findings caused fresh theoretical perspectives to be mobilised. Hence the importance of embeddedness and situated processes of localised learning emerged as the research progressed.

The research comprised three case studies of regional construction firms using multiple sources of evidence. Each case study was initially developed from a series of semi-structured interviews with over fifteen senior managers and directors of the company. The interviews were recorded and transcribed in full. NVivo 7 computer software was used to aid the analysis process. The interview schedule was designed to explore the ways in which individual directors and managers sought to conceptualise how the firm had remained ‘competitive’ over time. In light of the existing theories of competitiveness, the interviewees were asked specific questions about the firm’s evolution over time, current capabilities, competitive strategies, and future plans. Particular interest was given to how the firms responded to changing environments. Data collection was further enhanced by a range of informal interactions with the case study companies (*i.e.* telephone conversation and e-mail exchanges). In addition, each case study made use of archival sources, including the company’s annual reports, corporate publicity materials, and public-domain press articles.

CASE STUDIES

Case study 1: Forest Construction

Forest Construction was established in the early 1970s near the south coast of England. The company initially started as a civil engineering contractor working for local water companies. In 2008 Forest operates in nine locations around South England, the Midlands and South Wales. The company currently engages in four sectors: building, civil engineering, railway maintenance, and property development. The company has an annual turnover about £260 million and employs around 1000 staff. Forest has enjoyed three decades of almost uninterrupted continuous growth. In particular, the company has achieved a significant rapid growth over the last ten years during which the turnover has grown nearly five times. The interviewees attributed such success to their long-term investments in building a network of well-located and established regional offices. Forest sees its regional setup to be pivotal in sustaining the company's competitiveness.

By the mid-1990s Forest had established five regional offices. The development of successive regional offices was described to be a 'creeping' process. According to the chief executive, each regional office took nearly fifteen years to grow and establish its own team and client base. The chief executive explained that the slow and stable progress allowed each regional office to gel as a team and to grow its substantial knowledge about local markets, clients and supply chain. The concept of 'organic growth' was further used to describe the progressive development of the regional offices in order to manage a fine balance between workflow and staff growth. Also, each office was required to develop capabilities in both building and civil engineering. This dual capability was seen to provide a source of competitive advantage that Forest's rivals found difficult to imitate. This was also considered important in allowing the company to adapt quickly to the changing markets of building and civil engineering. In addition, the interviewees consistently emphasised the importance of localised networks and staff. The purpose of setting up a regional office was considered to demonstrate a presence and an ongoing commitment to both local clients and staff. The establishment of the regional office ensured clients of localised-based services as well as to attract and retain staff. The ethos of Forest's regional setup was described as 'staff don't have far to travel and thereby achieve a sensible home life'. It was found that most regional directors and managers had been working in local areas for a long period of time and confidently saw themselves as part of local communities. The interviewees were clear that the regional business was primarily built upon the opportunities developed and secured from local people, contacts and reputation. In other words, each regional office was *embedded* within its local market. This was seen to provide the key source of competitive advantage in comparison to national contractors who did not maintain a local presence.

It was considered significant that each regional office has its own team and resources to operate as an autonomous unit led by a regional director. Once the regional office's annual turnover target and business plan had been approved by the group board, the regional director was then fully responsible for delivering the plan with minimum interference from the board. The chief executive admitted that the regional directors are much more knowledgeable about local markets and supply chain than the group directors. The role of the group board was described as being limited to basic strategic guidance and to monitoring the regions' progress against agreed targets. Forest currently put a strong emphasis on the importance of controlled growth. They are also concerned to limit the extent of risk exposure. The group board sets a limit on the maximum contract value that the regional offices are allowed to tender for. They

also control the annual growth rate of each region. The overall picture is one of continuous transformation. In 2000 two of the oldest regional offices set up their own small satellite offices. These were originally set up for delivering major projects won by the regional office, but they were also encouraged to explore new opportunities in the surrounding area. Geographical expansion therefore tended to be achieved organically through satellite offices. However, the board recognised that a particular market niche developed within a region could usefully be projected nationally. For example, Forest currently established two specialist divisions – railway and civil engineering infrastructure – for the purpose of positioning against national procurement frameworks. The company’s business structure therefore combines a regional structure with two specialist divisions (see Figure 1). The specialist divisions were born from the regional structure, but provide the opportunity for the company to *embed* themselves in niche markets. Particular emphasis was given to the need to build relationships with clients and the supply chain to sustain continuous innovation. In other words, Forest enacts *localised learning* within both regional markets and specialist sectors.

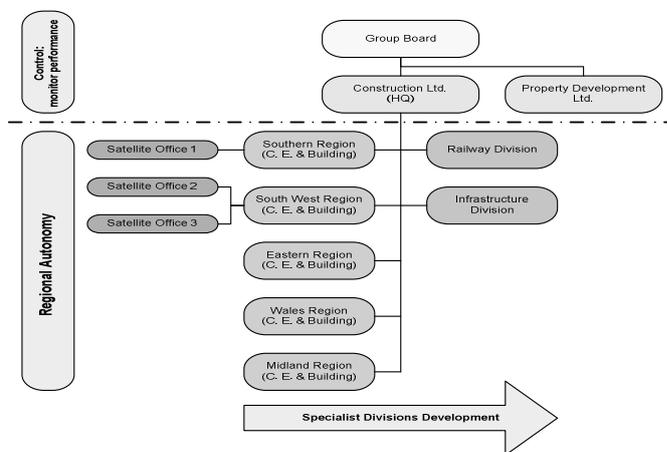


Figure 1 Forest’s Evolving Business Structure

Case study 2: Southern Construction

Southern Construction was established as a small civil engineering contractor in the mid-1960s in the South of England. The company currently operates four specialist businesses: building, civil engineering, social housing, and property services in nine locations in the South and Midlands of England. Southern currently has an annual turnover about £250 million and employs around 1,000 staff. They have achieved three decades of continuous growth. The annual turnover more than doubled over the last ten years. In particular, the social housing business has been a significant area of growth and is seen to be a strong area for future expansion. The interviewees were clear that moving into the social housing sector was pivotal in shaping the company’s development over the past ten years.

The story of how Southern diversified into the social housing sector was repeated by several interviewees. Southern originally started with speculative housing during the mid-to-late 1980s boom. The company established a speculative housing division with an entirely new core team and invested heavily in acquiring land for potential developments. However, a sudden and deep recession in the early 1990s left Southern with a large land bank and residual demand for houses. Releasing the financial burden of the accumulated land was critical to the survival of the firm. Southern was fortunate in finding a potential buyer for

some of its land bank in the form of a local social housing association (HA). Through the relationship established during the sale of land to the HA, Southern recognised the potential of the social housing sector. The company therefore formed a vision of redeploying the firm's redundant private housing resources within the developing social housing market. The interviewees suggested that Southern's early engagement with a locally-based HA provided the company with an opportunity to *learn* what was required in the sector, and to develop appropriate operations. In order to acquire the necessary expertise, Southern began to recruit experienced people from HAs and local authority housing departments. Particularly important was the need to acquire an understanding of social housing policy and grant regimes, as well as the specifics of HA working procedure and regularity. As a consequence of its early success, Southern began to formalise a social housing division and develop specialist capability. The capability was developed over time into what was described as a 'technical team', including expertise in housing design, building technology, land acquisition and contaminated land development. In consequence, Southern now has the capability to resolve problems for HAs proactively, thereby enabling the company to secure the majority of schemes on the basis of negotiation rather than competitive tendering. The technical team's capabilities are seen as a key source of competitive advantage that Southern's competitors found difficult to emulate. In addition, the interviewees consistently emphasised the importance of preserving the firm's reputation and maintaining close relationships with local HAs. The social housing sector was seen to be an 'incestuous' marketplace which depends on extensive networking. Southern also had to ensure that its senior managers are networked across relevant policy arenas in order to keep abreast of changing policy and procurement trends to better position itself for the future. They have therefore achieved success by becoming *embedded* with the social housing market. However, this success cannot be taken for granted. It can only be maintained through continuous *localised learning*.

Notwithstanding the above, Southern continued to operate profitably in both civil engineering and building sectors throughout the 1990s. Of significance was the way in which civil engineering division expanded into railway maintenance works on the basis of its track record in trackside buildings. In the early 1990 Southern set up a railway maintenance division. The maintenance division also moved into social housing maintenance by winning its first responsive contract in 1999. In contrast to Forest's regional-based structure, Southern operated on a specialist-division structure. The company is currently structured into four specialist divisions which operate across several area offices (see Figure 2). Each area office has its particular specialisation and *modus operandi* that fits the sector it serves. However, there are plans to set up a regional office in London. The interviewees explained the need for geographical expansion into London, which is seen to comprise an entirely different business context. Southern decided that it needs a London office in order to demonstrate presence to London-based clients. The establishment of the London office shows a trend towards adding a regional dimension to its current (see Figure 2).

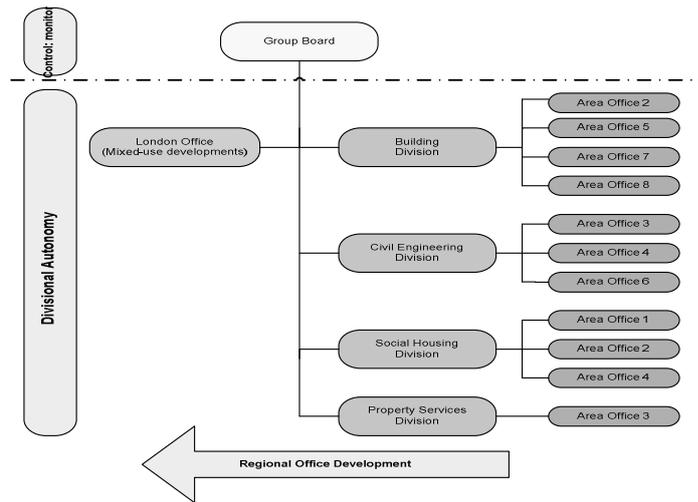


Figure 2 Southern's Evolving Business Structure

Case study 3: Northern Construction

Northern Construction was established nearly seventy years ago in the North of England. The company origins lied in contracting for small works for the steel industry. Construction is one of several businesses within a larger group and accounts for £110 million of the annual group turnover of £140 million. From its initial roots within the steel industry, Northern established itself as a civil engineering contractor working on road works and sea defences on the east coast during the early 1940s. The company has since expanded into building and other infrastructure works. Northern currently operates in four locations in the North and Midland of England, and sees itself as specialising in several specialist sectors: power stations, refinery plants, retail warehouses, water infrastructure, and PFI projects in health and education. The interviewees suggested that the company has accumulated expertise in these specialist sectors which differentiates them from their competitors. One director explained that the company has to be 'adaptable and focused on looking ahead to get into key sectors before everyone else does'. For example, Northern has recognised the waste management sector as a growing market which has been specifically targeted.

Northern was well-positioned to move into waste management as a result of its track record in the process industry. The firm has over ten years' experience in the delivery large complex projects (e.g. incinerators and refinery plants). The interviewee suggested that this specialist capability enabled Northern to move into the developing waste management sector. Both sectors have similar work procedures, liability requirements, and rigorous health and safety standards. In particular, Northern sought to partner with overseas waste technology consultants who were actively seeking local and reliable construction partners. The possibility of developing a partnership between the technology consultant and a local contractor potentially served the interests of both parties. The interviewees described how Northern established a partnering company with one technology consultant, and also were involved in several joint venture schemes with others. This enabled them to position themselves as leading contenders for future work within the sector. They were also clear that Northern's reputation within the process sector enabled them to sign exclusivity agreements with key technology consultants. Northern therefore found itself well placed to move into the waste sector and start building a track record. However, Northern was required to follow their partners nationwide. In the waste sector they were obliged to operate like a national contractor. The interviewees were clear that Northern could not compete out of its region on

price; it would therefore only agree to take on commitment outside its normal sphere of operation if the price was negotiated. The key challenge was how to ensure that the firm was invited to negotiate, which reflected the extent to which Northern was *embedded* in the sector. This in term was conditional upon continued *localised learning* relating to the relevant technologies and associated regulatory regimes.

However, the company’s annual turnover has fluctuated in recent years. The interviewees explained one of reasons was that the turnover generated from large negotiated projects frequently took time to come to fruition. Within the waste sector, it often took 3-4 years development work before a project began on site. This inevitably caused Northern consistency problems regarding turnover, workflow, and overheads. At the time of interview, Northern was seeking to instigate new strategic plans to resolve the problem. Improving the company’s regional business was singled out as one potential solution. Several interviewees suggested that whilst Northern continually focuses on large complex projects in the targeted specialist sectors, the company also has to focus on its regional business for the growth of smaller projects. It was argued that the short lead time of smaller projects would help alleviate the current peaks-and-troughs in turnover and profit. Developing a regionally-based business model was therefore suggested as Northern’s medium-term plan for increasing their penetration in local markets.

Northern is currently structured into three specialist divisions: major civil engineering, PFI, and facilities management (FM), all of which are based in head office (see Figure 3). Of significance is the way in which that Northern operates on a centralised-management model. All operations are run centrally from head office under the direct control of the group directors. Northern had previously established three local offices in adjoining areas with an aspiration for geographical expansion. However, these offices had not been accorded any autonomy and therefore were not embedded within their local markets. Indeed, the interviewees openly admitted that the local offices had no real presence in locally-based networks. In this respect, they operate primarily as ‘satellite’ offices, which are only responsible for delivering simple projects allocated by head office. Given the importance of improving the company’s regional business, several interviewees recognised that a greater degree of autonomy would be essential to facilitate greater entrepreneurial behaviour in exploring local markets. In short, Northern Construction is in a process of transition, moving toward to a regionally-based business structure (see Figure 3). However, it was also recognised that the group board needs to maintain some degree of centralised control relating to key performances indicators.

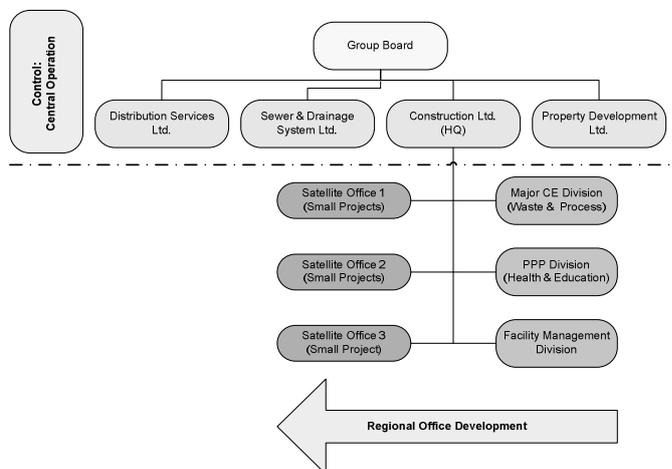


Figure 3 Northern's Evolving Business Structure

DISCUSSION

Localised learning and embeddedness

The preceding three case studies resonate strongly with the notions of localised learning and embeddedness. All three firms emphasised the importance of becoming embedded within close client relationships and localised networks. Further emphasis was given to the need to learn the necessary *modus operandi* for specific sectors and local markets. As a result, they were able to develop the necessary capabilities as well as to secure the majority of their works through negotiation rather than competitive tendering. They were also clear that the company's reputation is essential to sustaining relational ties. It is further evident that in all three cases the firms' unique capabilities are not rooted solely within the company, but are spread across networks of relational ties. Furthermore, the empirical findings demonstrate the ways in which opportunities emerge as a result of being embedded within local contexts and networks.

Tensions: central control vs. local autonomy

Another significant finding was that in all three cases the firms' organisational structures were continuously evolving, and often oscillating between a regionally-based model and one based on specialist division. Indeed, this process of continuous adjustment is, in no small way, the means by which such firms are able to continuously adjust to changing markets. Whilst the regionally-based model was suitable for local markets with a focus on local clients, the specialist-division model was necessary for the purposes of engaging with national clients. Each model brings its own particular challenges in terms of operations and staffing issues. It is also significant that all three firms operated the two business models concurrently in order to make themselves adaptive to market change. They were therefore less constrained by long-term plans and more able to respond opportunistically to emergent markets. Of course, to run both models concurrently also presents a number of challenges and tensions. One such challenge was to maintain the appropriate balance between 'central control' and 'local autonomy'. The empirical findings suggest that a de-centralised structure is essential in enabling multiple business units to become embedded within local markets or specialist sectors. Also, a significant degree of autonomy is required to facilitate entrepreneurial behaviours. But the findings also demonstrate that the group board had to maintain some degree of central control and coordination. In brief, the metaphor of 'constraining the tiger' best portrays the challenge of maintaining some degree of control over highly autonomous regional offices. Interestingly enough, it was found that notions normally held to be engines of competitiveness, such as performance targets, KPIs, and human resource policies, were in fact used by the case-study firms as constraining devices.

CONCLUDING REMARKS

The three case studies described above reveal the ways in which regional construction firms strived to remain competitive in dynamic environments. The insights into how three contracting firms enact competitiveness resonate strongly with notions of localised learning and embeddedness. Certainly these latter concepts provide better explanatory devices than the theories more usually mobilised to explain competitiveness in the construction sector.

Certainly the interviewees were resistant to any notion that there could ever be one-size-fits-all approach to competitiveness, or that there was any instrumental recipe that could be followed. They emphasised repeatedly the importance of developing good relationships with local players, and also the crucial importance of company reputation. In both respects, the development and maintenance of situated networks of relational ties is crucial. The overriding storyline focused upon the ways in which different business units seek to embed themselves in local communities or in specialist sectors in order to leverage and secure opportunities. There is little evidence in practice to support the currently accepted discourse of competitiveness in terms of narrowly-construed notions of efficiency and productivity. In contrast, the research identified a new discourse surrounding localised learning and embeddedness which resonates strongly with the *modus operandi* of regional contracting firms. The research further revealed the way in which contracting firms operate in a state of continuous adjustment between a regionally-based structure and a structure based on specialist divisions. Of particular interests are the tensions and challenges involved between autonomy of operation and the need for some degree of centralised control. Maintaining an appropriate balance between responsive entrepreneurship and constrained risk exposure is of central importance to the way in which contracting firms maintain competitiveness.

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