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Management of New Zealand Quantity Surveying Practices: A Longitudinal Study

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ABSTRACT

This is a study of the management and strategy of quantity surveying firms in Auckland from the bottom of the property cycle in the late 1980's to just past the next peak in 2008. Over the period the firms have developed a degree of differentiation based on the needs of clients for varying degrees of sophistication of service. This in turn leads to price differentiation. The firms who have become market leaders are all part of international groups and are able to use the expertise from within those groups to provide higher levels of sophistication of service. At the same time all firms have moved away from using contract labour and outsourcing as a means of having some flexibility in their cost structure. Because of this they may be vulnerable to incurring losses during the current downturn.

Keywords: quantity surveying, practice management, strategy, structure.

1. INTRODUCTION

This paper summarises three surveys of the management of New Zealand quantity surveying firms done in 1995, 2001 and 2008. It provides a historical record of some aspects of the management of those practices and some insights into how managers have to adapt their practices to meet changing circumstances.

2. THE CONTEXT

The firms concerned in this study are all based in Auckland New Zealand (NZ). Auckland has a population of approximately 1.4m. It is the commercial centre for and substantially the largest city in NZ (total population approximately 4m). Whilst Auckland rates as one of the most attractive cities in the world to live (rated 5th in the 2007 Mercer Survey) it has experienced significant turnover in its population with NZ born citizens moving overseas and immigrants taking their place.

At the time of the first study the construction industry was at the end of a period of low activity that followed on from the property market collapse in the late 1980s. Since that time the industry has experienced significant growth. The only period of set back was one following the Asian financial crisis in 1997; this was relatively minor. From 2003 to late 2007 the industry experienced a significant acceleration in growth. However in 2008 it faces a potentially substantial downturn following the slowing of the global economy in the wake of the US sub-prime market collapse.

The growth described above has tended to be across the spectrum of project types in both the public and private sectors. Land mark projects have included a casino, a new base hospital, major office buildings and hotels. A new stadium of the 2011 Rugby World Cup is now underway. Noticeable trends have included a large volume of apartment development in

the inner city and during the latter part of the period significantly increased levels of investment in infrastructure by both central and local government.

In the 2001 - 2008 period there have been changes within the Quantity Surveying Practice market in Auckland. Of the four firms interviewed in the first two periods, two have consolidated their positions as market leaders. At the same time the other two have slipped back to be part of a second tier of about six practices. All firms have grown in size however the first two have grown more than the others. Also in this period a new firm has come into the market and gained a significant position. This firm was formed by Directors who left one of the firms described above as having slipped back and joined forces with an international practice to form a new firm. This firm has developed to the point where it is able to compete with the market leaders.

3. THEORETICAL FRAMEWORK

3.1 Research Methodology

The study was carried out using loosely structured interviews. The interviewees were first asked to describe what changes had happened to the structure and ownership of their firm in the period. They were then asked to describe their experience of the market over the last five years and the ways in which the firm had adapted to changing market conditions. A checklist based on the framework for analysis described below was then worked through. The checklist developed from the one used in 1996. In 2001 a question was asked regarding the impact of globalisation, the information technology section was strengthened and a section concerning knowledge management added. In 2008 an additional section regarding planning for the expected downturn was added. The loose structure of the interviews inevitably means that the subsequent analysis is influenced by a good deal of subjectivity on the author's part. The benefit however is that a richer picture is gathered. In each set of interviews, the author found the firms had practices and management priorities which were different from those anticipated and which may not have been revealed by more structured interviews.

As a framework for analysis a five part model is used, this was developed earlier by the author based on studies of architectural and engineering practices in Auckland (Boon 1996) and is summarised below.

3.2 Framework for Analysis

The framework is based on the view that there is no predetermined formula for how firms should be managed. Rather, there is an interaction between, and a balancing of a number of factors, that lead to success or failure. The balance of focus for the managers will vary according to market conditions and competitor activity. In this framework, the key factors that need to be addressed in the management of the firm are seen as:

- Market orientation: the manner in which the firm positions itself to offer services to potential customers.
- Knowledge base: the way in which the firm is able to assemble the necessary knowledge to provide the services it offers its customers.

- Flexibility in cost structure and productive capacity: the ability of the firm to expand and contract in order to be able to both provide timely service to clients when required and avoid excessive fixed costs which would lead to it making losses during periods of low activity.
- Efficiency and price competitiveness: the ability of the firm to contain costs and be able to compete on the basis of price relative to value delivered
- Financial resources: the way in which the firm is able to manage its cashflows in order to sustain itself through periods of low profitability or loss.

These factors are seen as being interdependent, movement in one factor affecting the required action within another.

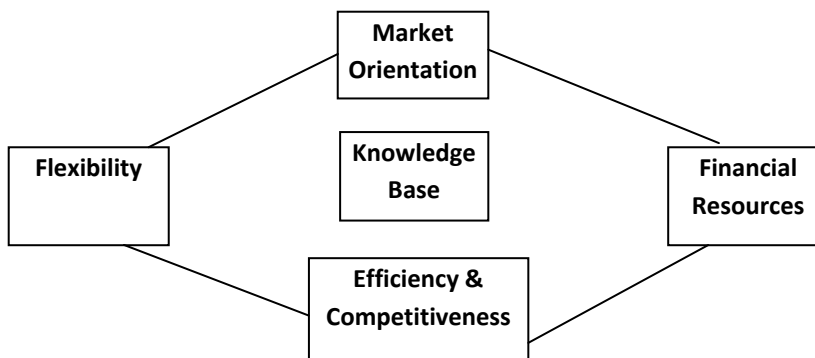


fig 1 Key Factors in the Management of a Professional Firm

4. MARKET ORIENTATION OF THE FIRMS

4.1 Branding

The firms that have come to dominate the higher end of the market in this period all operate as part of international practices and are branded as such. This association with international practices supports their market success in a number of ways. The branding and alignment with overseas practices gives them greater credibility with clients. International clients entering the New Zealand market are introduced to them by the associated firm in the home market of the client. However the real strength of the branding comes from the expanded knowledge base they can tap into either when being asked to provide cost advice on specialist types of buildings or when providing services on new types of procurement. This is discussed in more detail under “knowledge base” later.

4.2 Services Offered

At the time the firms were first interviewed they were grappling with the challenge of staying in business in a shrinking market. Part of their tactics for achieving this was to try and expand their services beyond their core services of cost management advice in support of the development of new buildings, into areas associated with existing buildings. Services associated with building maintenance and asset management were therefore being

developed and promoted. Except in one case these developments did not gain a lot of traction in the market place and are no longer promoted. In the one case where they have been successful they have now been transferred to a separate trading entity.

With the exception described above as the market started to lift in the mid nineties the firms have returned to their core business and developed the depth of services offered. This increase in depth of service has been an ongoing process.

A noticeable development since 2001 has been the increased involvement of the leading practices in high level advice at the outset of the project. Particularly advice regarding how to put the project together including the procurement methodology for both other consultants and the contractor. Also contractual advice traditionally given by architects and more recently by lawyers is now given by the QS practices.

The extent of cost planning advice given during the feasibility and design stages has grown over the period. In the early nineties advice tended to be of a limited nature provided for little or no fee. It now tends to be substantive advice for which substantive fees are earned.

Provision of value management facilitation emerged as a novel service in the late eighties and has developed to become regarded as a core quantity surveying service that is provided on most of the larger projects.

In the early part of the study period the use of schedules (bills) of quantities (SoQs) appeared to be in steep decline. The few active commercial clients in that period tended to regard them as an unnecessary expense and also did not wish to take the risks associated with documentation errors. Since then there has been significant regrowth, however there is a divergence of practice between firms. Some firms recommend them to their clients and are routinely commissioned to produce them whilst others rarely produce them. This divergence in practice is explained in part by client type and procurement methods. Public service type clients still have a preference for the traditional design – bid – build approach whilst many commercial clients have moved to procurement methods that have early contractor involvement, within which SoQs are not needed. However some of the fall off in use of SoQs appears to be associated with a lack of resource available to produce the schedules and a wish to avoid the risks associated with producing SoQs from poor quality documentation received from the design consultants.

Construction phase work including the provision of cost management advice, payment management and final account settlement remain significant services.

A significant area of growth throughout the period has been work carried out for project funders. At the start of the period it tended to be a relatively minor service associated with payment certification provided to the trading banks who provided the primary finance for the development. This has expanded over the period to include reviews of the financial feasibility of the project and the contractual arrangements underpinning the development conducted on behalf of the primary funder. More recently this advice has also been provided to the finance companies that provide the mezzanine finance to the project.

At the time of the 2001 survey the firms reported that involvement with commercial developers through the banks had led to them providing services direct to the developers. Initially this tended to be associated with helping the developers align their project with the

requirements of the banks. However these relationships have tended to develop further since then particularly in the areas of high level advice and cost planning.

During the latter part of the study period there has been a noticeable shift by clients away from the use of the traditional design – bid – build approach to procurement. In the early part of the study period the market for all services associated with property development had an excess of supply over demand. Clients were aware of the potential to drive prices down through the use of competitive tenders and therefore favoured that type of approach. In the later part of the study period the situation reversed and demand exceeded supply. In this environment clients became more concerned with the risks associated with securing (or failing to secure) appropriate resources in order to deliver the project on time as well as the risks of price inflation during the design period pushing the project over budget. As a result procurement methods that incorporated early contractor involvement have become more popular. Particularly those that transfer price risk to the contractor towards the end of the developed design stage (before construction details drawings have been produced). These normally involve some form of guaranteed maximum price and include various forms of design and build, particularly novated design and build and forms of management contracting. The firms have adapted to this market shift both in the form of the high level advice they provide and in the services they provided to facilitate these forms of procurement. These services include negotiating guaranteed maximum prices on behalf of the client; producing the documentation for and audit of sub-contract bid exercises and the certification of payments once the work is undertaken.

In the New Zealand market procurement methods such as alliances and strategic partnerships have limited use. However some of the firms have had some involvement in these forms providing advice in the setting of target outturn costs and the audit of actual costs.

Similarly public, private partnerships have limited traction to date. The firms with international connections believe they are able to provide the services when required by tapping into the expertise available from Australia and the UK.

At the same time that these developments have taken place in the building market the firms have been making inroads into the infrastructure market. The opportunities for this development have arisen from greater government expenditure at both central and local government level on roading, rail and drainage projects. Coupled with the greater expenditure have been increased concerns by government on issues of probity, budget control and value for money. The QS practices have found their core range of services can readily be adapted to meet clients' needs in this area. The firms with overseas associates have been able to tap into the expertise of their associates to gain initial credibility as they have entered the market.

5. KNOWLEDGE BASE

The 1996 interviews did not particularly focus on this issue however, the loose structure of the interviews resulted in the interviewees identifying the importance to them of having the right knowledge to enable them to deliver the required service to the clients. Further, the interviews highlighted that the firms' knowledge was largely in the minds of its people and not contained in databases or formal documentation therefore having the right people was

critical to success. In the light of these findings and the growing interest in knowledge management and the “learning organisation”, this area was examined in more detail in the 2001 survey. The headings used for analysis are derived from a brief literature review by the author but were particularly influenced by Dixon (2000) and are the same as those used in 2001.

5.1 Competency definition and training

All of the firms have had throughout the study period some form of system of annual review to review the positions and skills of employees and to assess their potential to progress. From these reviews, training needs were defined and provided. However over time these systems have become more sophisticated particularly within the leading firms. This has been driven in part by the need to maximise the ability of employees to provide the service required by the clients at a time when skilled personnel have been critically short. It has also been driven by employee demand; if they do not feel they are being looked after by the firm and are getting the professional development and promotion they desire they tend to seek employment elsewhere which particularly in the latter part of the study period has been readily available.

5.2 Best practice capture

All of the firms have formal quality assurance systems. Only one is ISO 9000 accredited. Whilst in the early 1990s this was seen as a desirable if not critical issue it now seems a low priority. These systems provide them with standard templates for normal activities such as estimate and report formats etc. They each feel this provides them with a base line of best practice. All firms reported that the systems have become more extensive and sophisticated over the years. Those involved with international practices are able to access examples of best practice from the international group when entering new areas of practice.

5.3 Expert knowledge transfer

The firms that had international connections all reported being able to access expertise when required from the group they were part of. This was achieved both by being aware of who had specialist expertise through attendance at group conferences etc and by posing questions by email circulation. It was felt that this had enabled the firms to bring significantly better levels of knowledge to work on specialist types of buildings such as healthcare, stadium development etc as well as enabling them to engage in the provision of advice in areas such as the use of new procurement methods. It is in this area of expert knowledge where the firms that have established leadership in the market appear to have most obvious competitive advantage.

5.4 Learning communities

This is a term used in literature on organisational learning to describe deliberately organised learning by peers sharing current experience (for example Raybould 2000). The survey showed this happening on two levels. First, at a local office level. All except one firm had a system of regular staff meetings at which current issues were discussed and experiences shared. In addition, two of the three firms with international connections met with senior people from other offices and discussed current issues and future strategies.

5.5 Mentoring

All firms reported mentoring juniors, this had tended to become more formalised in the latter part of the period with graduates entering the firm having formal development plans. None of the firms had systems for mentoring more senior staff when promoted. Given the small size of the firms, this is not surprising.

6. FLEXIBILITY IN COST STRUCTURE AND PRODUCTIVE CAPACITY

At the time of the 1996 survey, this was an area of particular focus. To survive the volatile period from the property crash of 1989 through to 1996 the firms had needed to shrink in size and restrict their fixed costs to a minimum in order to survive periods when they had little work and clients who were slow to pay. At the same time they needed to be able to provide timely and expert service to clients when the opportunities arose. The 1996 paper described the firms using the following tactics to cope with peaks and troughs in their workload:

- Using post contract work as a buffer
- Staff working overtime
- Transfer of work between offices
- Use of temporary employees
- Use of subcontractors.

By the time of the 2001 survey firms were reporting the workload as being less volatile. At the same time the expansion of the market had meant that few temporary employees or subcontractors were available. The firms were therefore relying on the first three bullets as means of coping with varying workloads. From that time to the present the market has been characterised by an excess of demand over the ability to supply. The firms have therefore had to try and become more efficient and recruit further employees from overseas. Limited success with both of these have meant that both directors and employees of the firms have faced high levels of workload and excessive levels of overtime. In this 2008 round firms reported a growing trend of Generation Y attitudes where employees sought to satisfy their own desires particularly around a balanced lifestyle and less commitment to meeting the needs of their employer. All firms reported that this issue of obtaining sufficient numbers of skilled professionals had been the critical issue of the 2001 – 2008 period.

At the time of the most recent interviews there was an expectation of economic recession. However all firms when interviewed reported their current workload was still substantive. Although they were being cautious about employing further staff none had contingency plans in place to rapidly downsize.

7. EFFICIENCY AND PRICE COMPETITIVENESS

At the start of the study period competition was based in most cases almost entirely on price. Firms described the need to adopt tactics of offering low bids with constrained levels of service. The market has developed over the period to become more sophisticated with competition on the larger projects being based either entirely on competence or on a combination of competence and price. The firms who have emerged as the market leaders report that they are not able to compete with the second tier firms on price, they believe their success in the market has been based almost entirely on an ability to offer a superior service at a reasonable price.

Throughout the period the firms have continually invested in upgrading their computer systems. In the 2001 to 2008 period they have moved to varying degrees of on screen

measurement and are now heading down the track of limited forms of paperless offices. They have to some degree upgraded their estimating systems using various forms of proprietary systems from overseas. They are also now involved in the use of web based project information systems. Whilst these developments have helped the firms become more efficient it has not provided a point of competitive advantage for any firm. Developments in this area whilst significant do not seem to have happened as quickly or to have been as radical as interviewees have predicted in each round of interviews.

8. FINANCIAL RESOURCES

At the time of the first interviews all firms had been through a period where their financial resources had been severely stretched in an environment of periods of little work, severe price competition, and clients who were slow to pay. Finding the money to pay staff and creditors each month had been a significant issue. However since then the general experience has been one of high workloads and reasonable profitability. Whilst financial management to ensure profitability is maintained has become more sophisticated and the management of cashflows is viewed as necessary, those interviewed did not regard this as a critical issue in the second and third rounds of interviews.

9. DISCUSSION

9.1 Strategy

Michael Porter in 1985 argued there are only two sustainable positions a firm can establish and sustain:

- Lowest price position – under this strategy the firm relies primarily on competing on price. Porter argues that this is a legitimate and potentially successful way of doing business providing the firm can find a means of actually producing the goods or service at a lower cost than their competitors. If they cannot, they are simply getting work by accepting lower profits than their competitors or incurring losses. Over time this is not sustainable.
- Value added position – in this strategy the firm determines its competitive position by adding additional features to its offering such that the increased price asked is acceptable to the client because it offers a better value for money proposition than the lowest price offering.

In the post 1989 crash period the firms were substantially competing on price but lacking the ability to lower their cost structure below that of their competitors. Inevitably they lacked profitability at that time. In the period through to the 2001 this changed so that by then at least three of the four firms under study at that time had developed a value added position focussed on providing high value cost management advice and services for property development. However there was little differentiation between the firms. Since then there seems to have been a split in the positioning of the firms. Two of the firms have strengthened their value added position (and have been joined in this positioning by the new firm). Whilst the other two firms have moved to be more price competitive whilst offering a comparatively lower level of service. Whilst the positioning of the first group sits well with Porter's 1985 thinking, the positioning of the latter two does not, as they sit somewhere between the low cost and the value added position. Porter (1985) characterised this type of

positioning as being “stuck in the middle” and argued it was not a sustainable position. However Scholes and Whittington (2005) based on work by Bowman (1995) argue that such a hybrid position is sustainable provided it represents value for money. Certainly the firms at the upper end of the market report they are unable to compete on price with the second tier firms and therefore cannot get work from price sensitive segments of the market. This divergence of strategy has emerged over time in a manner that Mintzberg and Walters (1985) characterise as an emergent (rather than deliberate) strategy.

Porter has subsequently extended his thinking, he now defines strategy as “*the creation of a unique and valuable position involving a different set of activities*” (Porter, 1996 p. 68). Porter (1996) argues that strategy hangs around “positioning” and “fit”. Positioning being the unique position of value in the market the firm seeks to occupy and fit the way the firm structures all its activities to efficiently and effectively serve that market position. He is particularly clear that strategy – the establishment of a “unique” position requires trade-offs. A firm cannot be all things to all people and must make choices “*trade-offs are essential to strategy. They create the need for choice and purposefully limit what a company offers*” (Porter, 1996, p. 69).

Porter (1996) goes on to argue that strategic positions emerge from three distinctive sources, which are not mutually exclusive and often overlap. These are:

- *Variety based positioning* - which arises from an ability to produce a subset of goods and services advantageously.
- *Needs based positioning* - based on servicing most or all of the needs of a particular group of customers
- *Access based positioning* - where the firm is positioned to serve the needs of a segment of customers who can be accessed in a different way.

Porter (1996) further argues that differences in customer needs do not translate into meaningful positions unless the best set of activities to satisfy them also differs. This is where the concept of “fit” comes in.

Since the 2001 survey forms of variety based positioning seems to have emerged to some extent around the degree of sophistication of services required by the client. The leading firms are offering increasingly sophisticated services to clients who need such services because of varying combinations of sophistication of building type and complexity of risk. In order to deliver these services (their fit) they carry the costs of higher levels of senior staff, more sophisticated systems and of membership of an international group. When clients select their QS consultants on the basis of an ability to deliver sophisticated services these leading firms have a clear competitive advantage when compared with the next tier of firms. On the other hand the second tier firms offer less sophisticated services to clients developing simpler buildings with less risk complexity. They are able to do this with a lower cost structure. When clients have a heavier weighting on price in their selection criteria this group of firms are more competitive than the leading firms.

In the 2001 report mention was made of another QS firm that had radically rethought its positioning using thinking that bears strong resemblances to Levitt’s (1991) concepts of “the potential product”. Levitt argues that it is possible to radically rethink a product or service so

that it substantially exceeds customers expectations and redefines the relationship. This firm had redefined itself as being in the business of helping clients acquire and manage assets. In doing so, it has identified that businesses' major assets are people, IT and (real) property. It had therefore merged into a group that included human resource management services, IT services and property acquisition and management services. In this way they have substantially differentiated themselves from the firms in this study. However this strategy does not appear to have worked. It is understood the firm concerned was unable to develop real synergies between the three groups of services and was therefore unable to present a better value proposition to their potential clients.

9.2 Structure

In the commentary section of the 1996 paper the author argued that the firms were developing towards becoming "open firms". That is firms with a relatively small core but which were capable of expanding to increase the volume of their outputs and the range of their services through being part of a network which included subcontractors and temporary employees. The author argued the firms needed to develop further down this path in order to provide the required services to their clients but avoid high fixed overheads which might threaten their ability to survive during times of downturn in business.

As discussed above the firms have not developed in this direction and now make little use of the services of temporary employees and subcontractors. Over the period the ability to acquire and retain people has been a critical issue for all firms. Because they have focussed on core cost management services the Qs firms are effectively the sole possessors of the knowledge base to deliver such service. They are therefore unable to outsource work. This does however mean that all the firms have little flexibility in their cost structure and may become financially vulnerable if the more severe forecasts associated with the current global economic downturn prove correct.

10. SUMMARY

This study has traced the management and development of QS firms in Auckland New Zealand from a trough in the property cycle at the end of the 1980s through to a point just past a peak in 2008. In that time growing differentiation amongst the firms can be observed. Some firm have developed to position themselves at the high value / high price end of the market offering sophisticated services whilst others offer more price competitive services with a lower level of sophistication. The ability to be at the high value end of the market appears depend on the having international associates who are able to provide expert knowledge when required.

At the same time all firms have moved away from having flexible cost structures based on using temporary contract employees and subcontractors. This may give them difficulties if the current downturn in the market becomes more severe.

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