Profitable Partnering for Lean Construction

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Introduction

To understand how partnering ought to be used to drive forward radically improved performance in the construction sector, we need to do as the two UK Egan reports, *Rethinking Construction* and *Accelerating Change*, advocate. We need to look to other business sectors and learn from their experiences over recent decades.

In the manufacturing sector, improved performance relates primarily to the elimination of unnecessary costs (in terms of the inefficient utilisation of labour and materials down through the entire supply chain). The manufacturing sector's long experience of lean thinking has taught that this can only be done with any real success if all the firms in the supply chain collaborate closely together within long-term, strategic supply-side partnerships. In the UK aerospace sector, these long-term, strategic partnerships created an entity that became known as a 'virtual company' and their purpose is to improve the competitiveness of all the firms in the virtual company by enabling them to convert unnecessary costs into higher and more assured profits and lower prices for the demand-side customer, whilst improving the technical quality of the goods they produce.

If the construction sector is to replicate the performance improvements of other business sectors, it needs to employ supply chain management and lean thinking techniques like partnering in the same way as those other sectors. Thus the construction sector needs to see partnering primarily as a supply-side tool that is a fundamental part of the lean thinking aspect of effective supply chain management and is the mechanism whereby unnecessary costs are converted into higher profits and lower prices.

This divergence of understanding between the construction sector and all other sectors about the true meaning of the term partnering was picked up in a recent book by Mike Murray and David Langford called *Construction Reports 1944–98*. They reminded us that in a leading article in *Building* magazine in March 1999 it had been argued strongly that:

'The most famous buzzword of all, partnering, has been subject to a lot of abuse. It has been highjacked by consultants and corrupted by contractors'.

If the construction sector is to learn from other sectors it needs to understand that supply-side partnering is the mechanism that enables lean thinking to flourish. Partnering should be about ending the selection of sub-contractors and suppliers by lowest price competition for each contract (which invariably causes the make up of the design and construction team to constantly change from project to project and prevents any real and continuous improvement of the processes or of the constructed product). Partnering should provide supply-side firms with a culture of security and trust that encourages everyone to objectively and accurately measure performance and share the result without fear of criticism or risk of rejection, and to then work together to improve each other's performance.

Partnering should be about creating a virtual company of supply-side design and construction firms that is able to compete more effectively in its chosen market because its constructed products are of far better quality and offer far better value for money than those of its competitors. At the same time, partnering should ensure far better and more assured profits for every member of the virtual company than can be achieved by those firms that have not embraced long-term, strategic supply-side partnering.

The book is written in straightforward language that ensures ease of use by those at the sharp end of each sector of the construction industry. It endeavours to end the confusion about the meaning of buzzwords, such as partnering, by giving explanations and definitions that are drawn directly from best practice publications that are in current use in other business sectors.

The book explains why long-term, strategic supply-side partnering will deliver radically better value for money and far better profits. It examines the wide variety and size of end-user customers and then explains why partnering is impractical for the small and occasional end-user customers that form the bulk of the construction industry's market. It also explains why supply chain management and lean thinking tools and techniques mean that partnering with the demand-side customer is of secondary importance to supply-side partnering.

It explains why end-user customers of constructed products have been demanding radical improvement from the construction industry for at least the last 70 years and it explains why long-term, strategic supply-side partnering is a prerequisite of radical improvement. It also compares the demand for construction industry reform in the UK with the demand for reform in other major countries, such as the USA, Canada and Australia.

The book explains the concept of a virtual company and describes the long-term, strategic, supply-side partnerships that are essential for its effective operation. It explains how strategic supply-side partnering can improve the profitability and the competitiveness of small and medium enterprises as well as that of large firms. It describes the seven principles of supply chain management that are the foundation of successful and profitable supply-side partnering in every sector.

The book also explains why demand-side clients who are intent on improving the value for money they get from the construction industry should deal with the construction industry in the same way that they deal with all other business sectors, and should insist on hard evidence of long-term, strategic supply-side partnering before awarding construction contracts (or consultancies). It then goes on to suggest a possible selection process for demand-side clients.

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The author wishes to acknowledge the help and advice he received from Iain Beaton, who developed a very successful best value tendering system whilst he was the Deputy Chief Executive of St Helens Metropolitan Borough Council. Without the benefit of Iain's help, Chapter 7 on the client's selection process would have been less relevant to the needs of client organisations.

1 What is Partnering?

Whenever I read about partnering in construction industry publications, or whenever I come across a discussion on partnering within the construction industry, I am struck by the widely diverging views of what is meant by the term 'partnering'. I am also struck by the fact that none of these views match what partnering is understood to mean, or how partnering is practised in other business sectors.

Highly successful companies in other business sectors have a remarkably common and unified understanding of what is meant by partnering. They have a shared view of where within the supply chain partnering delivers the greatest benefit, how partnering ties in with effective supply chain management and lean techniques, and how partnering ties in with the elimination of unnecessary costs and the delivery of high quality.

I am not alone in my concerns about the construction industry's misuse of the term 'partnering'. In a leading article in *Building* magazine in March 1999, Andrew Sims said:

'The most famous buzzword of all, partnering, has been subject to a lot of abuse. It has been hijacked by consultants and corrupted by contractors.'

If the construction industry is to move forward with a programme of radical reform and improvement, it needs to first agree what is meant by the many buzzwords that fly around the industry. In my earlier books, *Building Down Barriers – A guide to construction best practice* and *Performance Measurement for Construction Profitability* (see Further Reading), I endeavoured to explain and clarify precisely what is meant by terms such as 'lean construction', 'supply chain management', 'integration' and 'performance measurement'. Whilst the two books touched on the meaning of the term 'partnering', this book provides a detailed guide for those firms that want to walk the talk. In Chapter 9 I have included explanations and definitions of the many buzzwords in common use within the construction industry by cross-reference to well established definitions from other business sectors (thus avoiding any accusations of bias).

In all other business sectors, partnering is a concept that has been practised very effectively for several decades and has been the foundation of the improvements in quality, price and profitability. The understanding of what is meant by the term partnering is common to all non-construction sectors, as are the practices and the processes of partnering. It is well understood that partnering is the primary mechanism by which supply-side firms drive out unnecessary costs and drive up quality. Whilst they recognise that partnering can occasionally occur between demand-side customers and supply-side companies, they understand that partnering is primarily an activity that is confined to the supply-side of the industry and must be in position long before any partnering relationships with demand-side customers are considered. They see it as the key to open, constructive and productive relationships between the firms that form the supply chain for any given product or service.

In business sectors such as aerospace or electronics, end suppliers develop strategic partnerships with a number of firms in each supplier category. These long-term strategic partnerships are exclusively supply-side and do not involve the demand-side customers of the manufactured product. They are put in place to ensure that the entire manufacturing supply chain can compete more effectively by mobilising the key members of the supply chain to work closely together to offer lower prices, better quality (in terms of the demand-side customers' needs), and better, more predictable profit margins. Figure 1.1 illustrates these supply-side partnerships and shows the interface between the demand-side customers and the end supplier.

As Figure 1.1 shows, although the demand-side customers in other business sectors interface briefly with the end supplier to purchase the goods manufactured by the end

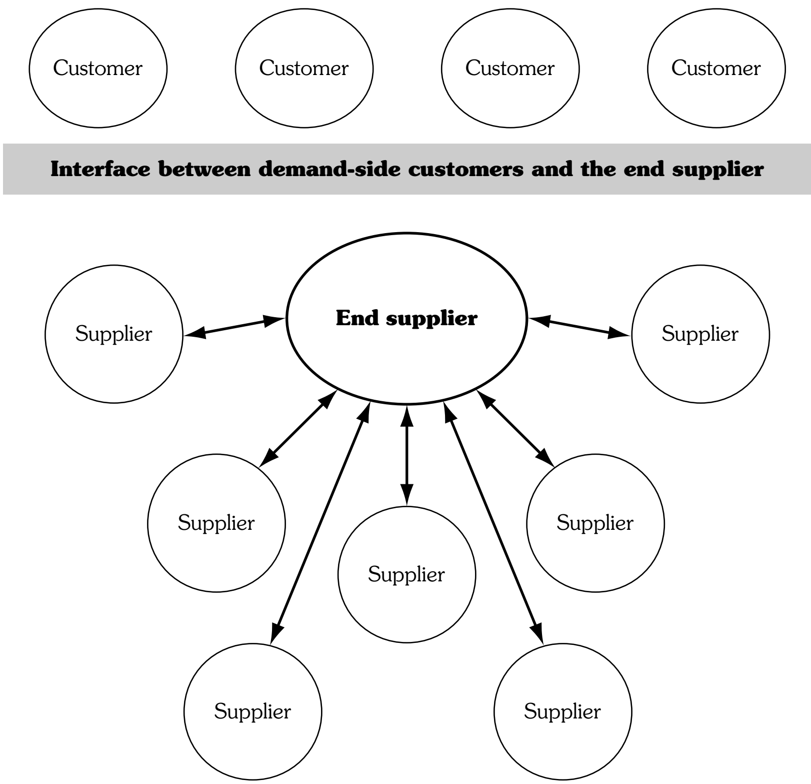

Figure 1.1 Partnering in non-construction business sectors

supplier, they very rarely form an intrinsic part of the long-term, strategic relationships that link together the firms in the end supplier's supply chain. In those other business sectors, partnering is a well developed and well proven long-term supply-side mechanism to facilitate continuous improvement on a year-by-year basis. The customer's role in such supply-side partnerships is to provide feedback, in the form of input into customer surveys, to the supply-side virtual company (the end supplier and the supply chain firms) on the quality and value for money of the goods purchased from the virtual company.

As was stated in *Building Down Barriers Handbook of Supply Chain Management (see Further Reading):*

'The commercial core of supply chain integration is setting up long-term relationships based on improving the value of what the supply chain delivers, improving quality and reducing underlying costs through taking out waste and inefficiency.

This is the opposite of "business as usual" in the construction sector, where people do things on project after project in the same old inefficient ways, forcing each other to give up profits and overhead recovery in order to deliver at what seems the market price. What results is a fight over who keeps any of the meagre margins that result from each project, or attempts to recoup "negative margins" through "claims". The last thing that receives time or energy in this desperate, project-by-project, gladiatorial battle for survival is consideration of how to reduce underlying costs or improve quality.'

Whilst successful firms in all other sectors see partnering as almost exclusively a supply-side process that is critical to the competitive success of the supply chain, virtually everyone in the construction industry seems to see partnering as the process that governs the interfaces between the demand-side customers and the fragmented supply-side design and construction team members.

This perception in other business sectors that partnering is primarily a supply-side function is firmly locked into their perception of what enables a firm to compete successfully and profitably. As both *Building Down Barriers Handbook of Supply Chain Management* and Sigma Management Development Ltd's book *Supply Chain Relationships in Aerospace – Working Together* correctly emphasised, competitive success in all other sectors comes from the ability of the end supplier to use strategic supply chain partnering to drive out the unnecessary costs that are generated by the inefficient use of labour and materials and to convert them into higher profits and lower prices, whilst at the same time maintaining or driving up quality.

In all other sectors, the critical importance of measuring and eliminating unnecessary costs is well understood, as is understanding how best to do it. The exception is the construction sector, where I have yet to hear the concept of unnecessary costs even mentioned! Because the UK construction sector has yet to develop a common understanding of unnecessary costs, because virtually no firms within the industry have an improvement programme that is based on the measurement and elimination of unnecessary costs, because the construction industry rarely practises (or even understands) true supply chain management, it is not surprising that the construction industry sees little value in long-term, strategic supply chain partnerships.

This lack of understanding of the importance of unnecessary costs, coupled with the serious dearth of information about their nature and magnitude (BSRIA and CALIBRE being the only organisations that are exceptions to the rule), has caused the concept of partnering to be directed away from the relationships within the supply-side design and construction supply chain, and to be directed instead towards the relationships between demand-side customers and the individual members of the supply-side design and construction team. In fact, it is not uncommon to come across instances where this demand-side/supply-side partnering actually acts as a powerful barrier to effective supply chain integration because the demand-side customer sets up separate partnerships with design consultancies (who develop the design in isolation from the construction team), then, at the completion of design development, the demand-side customer sets up a *separate* partnership with a construction contractor to construct the design produced by the design consultancies. Not only does this prevent any possibility of the elimination of unnecessary costs, but also time and time again the end result is a final cost that exceeds the tender price by a considerable amount.

This misconception of the purpose of partnering also completely ignores the nature of the demand-side customers, where the bulk are occasional or one-off customers who are unable to offer the industry a continuous stream of construction projects that would enable the design and construction teams to stay together from project to project and thus continuously improve their performance from the lessons they learn on each successive project.

The intermittent nature of most demand-side customers' construction needs has caused the construction industry to wilfully twist the purpose of partnering even further away from what is done in other sectors. Many within the construction industry would have one-off customers of medium-sized, short-duration projects believe that single-project partnering with a main construction contractor is all that is required to deliver radical improvements in value for money. In reality, the industry is subverting the true function of partnering to mean something that will not require any radical changes in the structure of the industry or in the way that design and construction teams are formed for individual projects. This restricting of partnering to the demand-side/supply-side relationship means that the main construction contractor will still be able to go to the market on each project and select the firms within the project construction supply chain on the basis of lowest cost. Frankly, this exposes a level of delusion within the construction industry that is more than a little shameful. It also exposes a resistance to change and an isolationist attitude that will form an unbridgeable barrier to any real improvement in performance or profitability, or to the delivery of radically better value to the end-user customers of buildings.

If partnering is to make any real difference to the performance of the construction industry, it must be used in precisely the same way as it has been used in other sectors. It must be firmly focused on improving the relationships between the supply-side firms that make up the design and construction supply chain. The purpose of partnering must be locked into the elimination of unnecessary costs by the supply chain firms working co-operatively together within the security of long-term, strategic supply chain partnerships.

Partnering must primarily be recognised as a supply-side tool that operates at a strategic level, that over-arches individual projects and is an essential precursor to an open and trusting culture across all the firms that need to work together within the entire design and construction supply chain. The creation of such a culture is imperative if the firms are to collaborate together to drive down unnecessary costs and drive up whole-life quality.

To summarise, if the construction industry is serious about delivering a radical improvement in performance and if it intends to import best practice in supply chain management (as every report around the world is demanding), the following definition of partnering ought to be adopted throughout the industry.

Partnering

The formation of long-term, strategic supply-side relationships between the firms to make up a design and construction supply chain that is capable of delivering a comprehensive range of building types and construction activities for a variety of demand-side customers (small and occasional as well as major repeat customers).

The primary purpose of such strategic supply-side partnering relationships is to enable the supply-side

design and construction firms to work together at both project and strategic level to continuously drive out unnecessary costs (caused by the inefficient utilisation of labour and materials) and to continuously drive up whole-life quality.

The output of such strategic supply-side partnering should be the continuous conversion of unnecessary costs into lower prices and higher profits, whilst improving the whole-life value of the building or the constructed product.

In the case of major repeat demand-side clients, the nature of their long-term construction needs may warrant the formation of alliances or partnerships with supply-side design and construction teams because of the potential for continuous improvement of the team's understanding of the particular demand-side client's business needs from project to project. However, as I explain later in Chapter 7, 'The Client's Role in Partnering', any client in search of best value ought to insist on hard evidence of pre-existing supply-side partnerships between the firms that are intended to provide the members of the supply-side design and construction team. These pre-existing supply-side partnerships must include the key sub-contractors, trades contractors and manufacturers.

In conclusion, the overwhelming evidence from other business sectors is that supply-side partnering is absolutely essential to effective supply chain management, lean thinking and the delivery of best value. As a consequence, evidence of pre-existing long-term, strategic, supply-side partnering ought to be an essential part of any demand-side client's selection process.

2 Why Partner At All?

To answer the question posed in the title of this chapter we need to look at how partnering operates in sectors other than the construction sector and understand why successful companies in those sectors continue to believe that supply-side partnering is fundamental to competitive success.

In other sectors, the secret of competitive success is not to pare profit margins to the bone or to force suppliers to cut their profit margins to a level where their long-term viability is damaged. Competitive success is not based on delivering goods that cost far more than the customer expects to pay, are delivered far later than originally promised, or that cost far more to maintain and operate than was allowed for in the customer's business plan. Nor is competitive success based on delivering goods that are not quite complete, do not function as efficiently as the customer requires, or contain components and materials that do not perform as well as the customer expects.

In other sectors, the secret of competitive success is based on boosting profit margins and lowering prices by the continuous reduction of unnecessary costs (that are generated by the inefficient utilisation of labour and materials). It is based on developing a deep understanding of the demand-side customer's business needs and delivering goods that satisfy (or, ideally, exceed) those needs at a price that matches that which the customer can afford to pay based on the long-term business plan. It is based on the recognition that the competitive success of the end supplier (the supplier that directly interfaces with the demand-side customer) is totally dependent on the competitive success of every firm in the supply chain. It is based on the recognition that competitive success is dependent on the supply chain operating as a virtual company where every firm in the supply chain is pulling in the same direction, where all practices and processes are aligned towards a common goal, and where a culture of openness and trust exists across all firms at all levels.

Above all, in other sectors the secret of competitive success is to work in open, collaborative and constructive partnerships with all the firms that make up the supply-side supply chain, where every firm strives to add value to every other firm's processes and no one is in the game of screwing their supplier's costs down, regardless of the effect it might have on the supplier's commercial viability.

Many in the construction industry believe the site- and craft-based nature of the industry makes it impossible to learn from other sectors. Many believe that nothing is broken in the traditional 'tried and true' processes and practices, so there is little point in trying to mend them. I believe that much of this resistance to change is caused by a lack of migration of managers between the construction sector and other sectors. Elsewhere, people and ideas regularly transfer between sectors and this has been the norm for decades. This means that companies regularly have an influx of highly intelligent and experienced managers at all levels, who are able to look at established custom and practice with fresh eyes and ask the question: 'Why do you do things this way?' More importantly, their colleagues welcome such questions and are receptive to people coming in from other sectors with fresh ideas and unblinkered eyes.

In the construction industry (including the designer consultancies) it is rare to come across anyone who has been imported from another sector, or to come across anyone