THE MYTH OF BEST PRACTICE THROUGH THE LENS OF CONSTRUCTION SUPPLY CHAIN MANAGEMENT

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Much is made of the concept best practice. It is repeatedly drawn upon by policy makers, academics and industry practitioners as a quasi-solution to construction industry ills. As an expression, it is often difficult to contest. Indeed, best practice implies identifying policy, process and procedure that offer the most optimum and efficient outcome. In short, best practice is all about improving performance. However, for the majority of commercial organizations, best strategy is also about improving performance. Despite the apparently congruent ambitions, best practice is not equal to best strategy. This misapprehension only serves to propagate the myth of best practice. This is a polemic paper, exploring the utility of best practice through the lens of construction supply chain management. Drawing inspiration from economic theory, construction management literature and previous supply chain management studies, the myth of best practice in construction supply chain management is exposed. Regardless of Government sponsorship and considerable academic investment, adoption of best practice in UK construction supply chain management remains slow and routinely symbolic. Yet, supply chain members do not behave irrationally. If best practice was truly in their best strategic interests it is highly probable that supply chain members would adjust their rules of economic engagement accordingly. It may be strongly argued that in contrast to the prevailing hype and repeated suggestion of supply chain win-win scenarios, UK Government endorsed best practice does not adequately serve the commercial interests of the majority. The very limited achievements of demonstration projects serve as a case in point. Disappointingly, few lessons appear to have been learned. The myth of construction supply chain management and by extension best practice in UK construction continues unabated albeit under a shiny new banner, Construction 2025.

Keywords: best practice, supply chain management, myth.

INTRODUCTION

Although 'myth' is frequently used to simply depict a falsehood, the definition adopted in this paper draws upon a similar conceptualization of myth as that mobilized by Bradley *et al* (2000 p.1),

"...by 'myth' we refer to widely believed bodies of ideas about the way work is changing. These ideas are held by entrepreneurs, managers, politicians and policy

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makers; they have been explored and developed by many academics, especially in management and business studies and in economics."

Whilst critiques of 'myths at work' include the myth of lean production, the myth of globalization and the myth of technology and science as the solution to workplace problems, this paper focuses upon the myth of best practice. Indeed, best practice continues to be mobilized by Government, academia and professionals to inform, shape and provide legitimacy within the decision-making process and as a way to legitimize both the form and the content of change initiatives (BIS, 2013b). Notably, whilst these myths are undoubtedly very persuasive and extremely popular, they have a tendency to reside beyond the critical gaze. This paper is an attempt to explore the myth of best practice through the lens of construction supply chain management.

The UK Government has a history of meddling in the machinations of the construction industry (see <u>Murray and Langford, 2003</u>, <u>Adamson and Pollington</u>, 2006). Political intervention is not unwarranted; construction is a significant contributor to the national economic and social climate. Recent figures indicate industry turnover is in the region of £90 billion (down approximately 20% on 2008 figures), gross domestic product (GDP) is 6.7% and direct employment figures equate to approximately ten percent of the UK working population (2 million employees) (<u>BIS, 2013a</u>, <u>BIS, 2008</u>). In short, construction matters.

For the UK Government, interest in construction is arguably twofold. First, the performance of the construction industry has both direct and indirect consequences for current and future Government fiscal policy, regardless of political persuasion. It is widely conceded that a buoyant construction sector provides a sound economic foundation and instils the commercial confidence necessary for a positive trade and industry outlook. Conversely, a construction industry in recession erodes consumer confidence and subsequently weakens prospects for a sustained socio-economic recovery.

Second, not only is Government a political guardian of construction industry interests, it is also a major consumer of construction services and goods. As the largest construction client, the 'buyer' objective of 'best value' and securing the 'most economically advantageous tender' arguably regulates the procurement process. The promise of best practice' gives the buyer added assurance that their key objective of 'value for money' will be achieved. In theory, any reduction in project waste via efficient and effective practices will culminate in 'project' cost savings. These cost savings can be passed to the construction client via increasingly competitive tender prices. Despite considerable political and by extension client intervention, the construction industry remains largely impervious to structural and cultural change.

Numerous reports, championed by previous Governments have repeated challenged the construction industry to 'change its ways' and improve both industry performance and reputation (Latham, 1994, Egan, 1998, Wolstenholme, 2009, BIS, 2013a). Indeed, the past two decades has borne witness to a concerted effort to 'correct' what the UK Government and various client forums' regard as endemic industry inefficiencies and substandard performance. In response to repeated criticism and self-examination, the UK construction industry sought to 'creatively swipe' management theory and best practice from other industries, most notably the automotive (Egan, 1998), retail and manufacturing sectors (Briscoe and Dainty, 2005). Industry examples of best practice include, total quality management (TQM) (McCabe, 1988), lean production (Koskela,

<u>1992</u>), business process re-engineering (<u>Green and May, 2003</u>) and supply chain management (<u>Holti *et al.*, 2000</u>).

It is through the lens of supply chain management that the myth of best practice can be disclosed. Over the past two decades, supply chain management in construction has been a popular theme of the reform movement. However, best practice in construction supply chain management arguably remains overworked and under analysed. It is readily conceded that despite considerable effort, adoption of best practice in construction supply chain management is at best limited (BIS, 2013b, Fernie and Tennant, 2013). Whilst conformist interpretation focus attention on adoption (Redmond, 2003), repeated rejection of best practice in construction supply chain management raises question marks over applicability. Mainstream response is to ask questions of the construction industry; for example 'why is the construction industry so backward?' (Woudhuysen and Abley, 2004). This paper embraces an unorthodox stance, asking questions of both best practice and those who continue to endorse it.

This is thus a polemic paper, exploring, exposing and debunking the myth of best practice by deconstructing the way in which supply chain management in construction has evolved. The discussion in the paper is organized as follows. The opening section of the paper outlines the concept of best practice. The next two sections provide an explanation of supply chain management including a contextually sensitive interpretation of current practice in construction supply chain management. The discussion section unpicks three key 'inventions' of best practice. The paper concludes that best practice has ultimately failed to serve its intended purpose and it is timely for construction stakeholders and industry to acknowledge the limitations and move on.

BEST PRACTICE

The term 'best practice' is not confined to construction. Best practice is applicable to a wide range of industry and non-industry disciplines. Consistent with many contemporary management terms, best practice has multiple definitions. Some define best practice simply as *"the knowledge that underpins examples of excellence"* (SECBE, 2006 p.3). Others adopt a more mechanistic interpretation, defining best practice as specific methods, techniques or processes that consistently lead to a desired and/or successful outcome. Regardless of the semantics, identifying and deriving best practice ultimately requires the study of work and adopting those methods, techniques or processes that are deemed to be more successful than others.

The concept, development and diffusion of best practice programmes have been a pivotal and continuing theme in the commercial campaign for improving construction efficiencies and eliminating waste (Murray and Langford, 2003, Green, 2011). Over the past two decades best practice initiatives in construction have included procurement, risk management, health and safety, lean construction, business process re-engineering, performance management, integrated project teams and supply chain management. The comprehensive list of 'borrowed' business processes is indicative of the range, scope and chronic popularity of best practice initiatives in the construction management field of study.

Best practice is not without its detractors (Fernie *et al.*, 2006, Green, 2011). Sometimes viewed as a management fashion label, best practice it may be argued is essentially a one dimensional management / operational tool. Consequently, methods, techniques and processes that are proclaimed successful elsewhere are routinely transferred to extraneous business arenas, regardless of diversity, complexity and discrete market conditions. According to Green (2011 p.319), this endorsement of over-simplistic *"improvement recipes"* has been the cause of industry problems as opposed to their solution. Despite this 'informed cynicism' and notwithstanding the symbolic or substantive contribution to construction industry performance, the concept of best practice continues to inform and shape both Government policy and construction stakeholder aspirations.

SUPPLY CHAIN MANAGEMENT

A universal definition of supply chain management remains elusive (Stock and Boyer, 2009). Given the lack of consensus, the term supply chain management frequently means different things to different people (Skitmore and Smyth, 2009). Indeed, the pluralistic nature of supply chain management creates ideal conditions for ambiguity and ongoing ideological tension (Kraatz and Block, 2008). Notwithstanding the potential for competitive definitions, a careful review of supply chain management 'thinking' over the past three decades disclose three principle schools of supply chain management thought; namely a functional school, philosophical school and a conceptual school.

With its origins in manufacturing, the first supply chain management school of thought focuses on traditional elements of company organization, such as logistics, procurement and production. This may be classified as the 'functional' school of supply chain management. The function is *"to leverage the supply chain to achieve the lowest initial purchase prices while assuring supply,"* (Spekman *et al.*, 1998 p.631). This *"involves the buyer undertaking proactive supplier development work, not only at the first tier of the supply chain, but also at all the stages in the supply chain from first-tier through to raw material supply,"* (Cox *et al.*, 2006 p.34). In response to greater commercial complexity and growth in global trading, alternative schools of thought emerged.

The second school of thought adopts a philosophical outlook. The pragmatism evident in the functional school is supplanted by an all-encompassing, panoptic interpretation of supply chain management. The traditional organizational boundaries between management function(s) and commercial exchange has become increasingly indistinct. Contemporary supply chain management is not simply about logistics, procurement or production; it is about the way the organization conducts business and engages in commercial relationships in its broadest sense. According to Mentzer *et al* (2001 p.18) supply chain management is *"the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole"*. In other words, supply chain management becomes a 'way of working'.

Recent calls from the supply chain management community have arguably established a third school of supply chain management thought; namely, a conceptual school (Carter, 2011, Choi and Wacker, 2011). The crux of the debate is the suggestion that supply chain management is presently devoid of robust, coherent and discrete theoretical foundations. Proponents therefore argue that for future substantive developments in knowledge and understanding, it will be necessary to undertake an introspective and critical appraisal of current supply chain management theory and practice. This includes, theory building and conceptual developments that may challenge both the 'functional' and 'philosophical' schools of thought.

CONSTRUCTION SUPPLY CHAIN MANAGEMENT

In construction, the theory and practice of supply chain management continues to attract considerable interest (<u>O'Brien *et al.*</u>, 2009, <u>Pryke</u>, 2009, <u>BIS</u>, 2013b). There are very persuasive arguments for the adoption of supply chain management. However, in construction there are also complex and diverse factors that arguably require contextually informed appraisal (<u>Green *et al.*</u>, 2005, <u>Fernie and Thorpe</u>, 2007).

In stark contrast to the commercially refined, largely unilateral and longer-term trading relations emblematic of the manufacturing sector, the organization of construction supply chain management is fragmented and short (Skitmore and Smyth, 2009). In essence, there are two distinct supply chain configurations in construction; a client-led supply chain and a contractor led supply chain (see figure 1.). Both of which coalesce around the execution of the construction project.



Figure 1: The Structure of Construction Supply Chain Management

The client-led supply chain reflects the traditional bi-lateral commercial relationship between the construction client and main construction contractor. Alternatively, a more progressive tri-lateral relationship between the construction client, specialist consultants and main construction contractor may be adopted. In the wake of the Rethinking Construction report (Egan, 1998), the tri-lateral arrangement of key supply chain stakeholders has grown in popularity (RICS, 2006, RICS, 2010). Regardless of membership or configuration, all the supply chain relationships are either project or repeat project orientated (Skitmore and Smyth, 2009). Given these project characteristics, the client-led supply chain is temporary and rarely extends upstream beyond tier one (the main construction contractor) or alternatively, downstream (the end-user).

The contractor-led supply chain largely reflects the bi-lateral commercial relationship between the main construction contractor and second tier construction service and product providers; namely, construction sub-contractors and/or suppliers. In reality, the contractor-led supply chain is a dyadic commercial relationship. In contrast to the client-led supply chain, the contractor-led supply chain has an organizational focus and rarely extends upstream beyond the second tier (sub-contractor / supplier). On the rare occasion when the supply chain relationship does extend beyond the second tier, it is typically a commercial relationship with a 'commodities' supplier; for example, doors, windows and/or plasterboard. Regardless of tier, commodities or provider, contractor-led supply chain membership is typically based on a number of performance criteria of which lowest price arguably remains first among equals (Eccles, 1981, Hartmann and Caerteling, 2010).

RESEARCH STRATEGY

The research strategy is not dedicated to testing a theory or building prescriptive models. On the contrary, the objective of the research is simply to adopt an alternative viewpoint, raise questions and stimulate debate. There are a number of parameters to this paper. Given the strong links between government policy, the reform agenda and supply chain management practice, the commentary retains a distinctly UK relevance. Informing the discussion is a wide ranging literature review. This draws inspiration from a number of discrete industry and non-industry sources including economic theory, government reports, construction management literature and previous supply chain management studies. Currently beyond the parameter of the discussion is two distinct construction industry sectors; namely, house building (domestic construction) and infrastructure (civil engineering).

DISCUSSION

Much is made of the concept 'best practice'. It is repeatedly drawn upon by policy makers, academics and industry practitioners as a quasi-solution for a range of industry ills. As an expression, it is often difficult to contest. Indeed, best practice implies identifying policy, process and procedure that offer the most optimum and efficient performance outcome. In short, best practice in construction supply chain management is all about improving performance.

The exploration, exposing and subsequent debunking of supply chain best practice is partitioned in to three distinct groups; namely, strategy, universal applicability and demonstration projects. Whilst the former two groups (strategy and universal applicability) may be labelled contested theory and owe more to persuasive discussion than science, the latter is based on a review of available empirical evidence. Individually they undermine best practice as a panacea for construction performance improvement and by extension industry transformation; collectively they reveal best practice as a workplace myth.

MYTH 1: BEST PRACTICE IS BEST STRATEGY

Whilst frequently considered as synonymous, best practice and best strategy can reflect very different business agendas. Best practice and best strategy on occasion may be congruent; however it is highly dependent upon a number of discrete variables. Crucially, interpretation of best practice is perspective dependent and this would include the individual and unique standpoint of each supply chain member. As Cox (2006 p.31) noted, *"the relationship between buyers and suppliers are essentially contested because of the non-commensurability of their objective interests…what may be desirable for one party in any exchange may not be equally desirable for another"*. This highly contested and commercially dynamic terrain repeatedly sanctions contradictory agendas based upon the self-interests of both the buyer and supplier.

For example, best practice from the client perspective (buyer) will in all likelihood equate to best strategy. This is simply because the commercial and wider business goals of best practice and best strategy are congruent. Embracing best practice is understood to improve both quality and time management, leading to a reduction in waste and most crucially lower the financial/capital cost. Client endorsement of best practice however frequently fails to consider the supplier viewpoint in exchange economics. Accordingly, best practice initiatives proposed by the client body (i.e. the buyer) are unlikely to be commensurate with a contractor perspective (supplier). On

the contrary, implementation of best practice may challenge key business objectives such as commercial leverage, relational power and trading margins.

Supply chain best strategy is unbound by the optimistic notions of best practice. It is readily conceded that concepts of best practice may inform strategic direction, however if best practice is perceived to compromise best strategy, then best practice will be largely overlooked or simply paid lip service. Supply chain members do not behave irrationally. If best practice was truly in their best strategic interests it is highly probable that supply chain members would adjust their rules of economic engagement accordingly. It may be strongly argued that in contrast to the prevailing hype and repeated suggestion of supply chain win-win scenarios, UK Government endorsed best practice does not adequately serve the commercial interests of the majority.

MYTH 2: UNIVERSAL APPLICABILITY

Universal applicability of best practice highlights two important drawbacks; namely context and competition. First, the diffusion and development of best practice and issues of context is neither new (Green *et al.*, 2005) nor limited to supply chain management studies. Much has been written about the unique character and culture of the construction industry and the prerequisite for sympathetic interpretation of borrowed business practices witnessed elsewhere. The universal applicability of best practice evokes a rote generalizability that renders meaningless important local interpretations and tacit understandings.

For a project-based industry, universal applicability not only neglects industry and cultural context; the issue of knowledge transfer between construction projects is also largely overlooked. In Smyth's (2010 p.268) critical review of demonstration projects, it was stated that industry reports purporting to disseminate best practice *"tend to be descriptive of what was achieved with scant attention to how the achievements were brought about. This limits the extent and transferability of knowledge to other organizations"*. Vagueness of time, place and circumstance undermines both the validity and extrapolation of the experiential learning taking place.

Whilst the universal applicability of business policy, process and procedure is routinely challenged, universal applicability of best practice and issues of corporate competitive advantage is frequently overlooked. Advocates of supply chain management suggest that organizations engaging with best practice are likely to increase their commercial competitiveness. This approach to competitive advantage is achieved by reducing project 'production' costs; these potential cost saving are passed on to the buyer (construction client). Although the construction client is at pains to stress that the construction contractor and by extension supply chain partner / member selection will be based on best value, this is arguably code for lowest capital cost. A low cost business strategy may impact positively on workload and turnover; however it does not necessarily address corporate margins.

In business, the over-riding goal *"is to position a company and its (services and) products where the market opportunity is highest."* (Nattermann, 2003 p.2). Adoption of universally sponsored best practice arguably achieves the opposite. By herding supply chain members to adopt a standard business model, opportunities for organizations to differentiate themselves from supply chain competitors diminish. A diverse and complex network of economic exchange partners requires a dynamic and agile supply chain management strategy. It is doubtful that largely static, acontextual improvement recipes will afford supply chain members the opportunity to differentiate

services and goods within an unregulated, crowded and highly competitive marketplace. For the majority supply chain members, profit maximisation as opposed to profit-sharing continues to governs the strategic decision making process.

MYTH 3: DEMONSTRATION PROJECTS

Construction demonstrations projects were a key feature of the reform agenda. By 2002 (Egan), it was reported that there were over 400 demonstration projects (38% housing and 62% construction) with a combined value of approximately £6bn. The statistics are impressive; however the use of demonstration projects to identify and disseminate best practice was arguably unsound. Labelling a construction site as a demonstration project immediately singles it out as different. All the supply chain stakeholders will be aware of this new-found status and as a result are likely to adjust their behavioural responses accordingly. Commonly known as the 'Hawthorne Effect', Fernie *et al* (2006) previously questioned to what extent this well-known phenomenon was considered in the final analysis of demonstration projects.

In addition to participants modifying their behaviour, demonstration project and learning by discovery has acknowledged limitations. Unless supported by "*explicit strategies for transferring learning*" (Garvin, 1993 p.83), there remains a inherent risk that poor scrutiny and casual analysis will actually promote supply chain inefficiencies and incompetence. Setting aside conceptual limitations and assumptions, arguably the most telling outcome from the construction demonstration projects was the lack of independent and rigorous empirical evidence (Smyth, 2010, Green, 2011). Despite considerable investment and opportunity, the absence of substantiated, independently verified empirical evidence simply confirms the myth of supply chain best practice; it really does lie beyond the critical gaze.

RECOMMENDATIONS AND CONCLUSION

The question marks associated with demonstration projects are not insurmountable. Whilst resultant evidence of supply chain best practice may have been found wanting, the potential to learn and transfer knowledge remain. However, it may require an alternative set of ground rules. For example, why try to imitate management theory and practice from elsewhere? What about two hundred years of construction innovation? What about the significant majority (SME's)? Rather than reflect 'on' adopted best practice as in previous demonstration projects maybe encouragement should be given to reflect 'in' current construction practice.

Presently the rhetoric of supply chain best practice frequently belies the reality. At the heart of supply chain best practice debate is the ever-present non-commensurate business objectives of economic exchange. Whilst advocates of supply chain best practice are keen to declare the potential for win-win scenarios, win-lose scenarios remain far more common place. This is not a criticism of current construction supply chain management practice. Win-lose scenarios are simply a manifestation of the orthodox model driving economic exchange relationship in construction. Until this commercial tension is resolved in an approach that is commensurate to both the client (buyer) and the contractor (supplier), the myth of best practice in UK construction supply chain management is likely to endure. To suggest otherwise, is probably an example of unremitting buyer / supplier gamesmanship.

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