

# CONSTRUCTION PARTNERING: MOVING TOWARDS THE RATIONALISATION FOR A DOMINANT PARADIGM

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## ABSTRACT

*This paper critically reviews seminal literature on 'traditional' and non-market partnering exchanges, in order to identify core congruent issues, drivers and agents of change. It draws out a number of key themes to better understand why the construction industry has remained relatively unchanged; even though successive reports have tried to rectify the industry's challenges. Acknowledging that there is no one clear definition, strategy or template for the effective implementation of partnering, findings from extant literature highlight eight dominant drivers deemed integral to augmenting project performance and profitability. So, whilst the construction industry invariably conducts its business with a smaller ratio of strategic partnerships than commonly believed, and accepting buyer dominance has predominantly remained, it is advocated that there is an exigent need to disentangle the project partnering initiative through some form of deterministic model. The case for this is presented through a relationship schema that maps the fabric, reliance and drivers for partnering success.*

**Keywords:** Collaboration, Supply Chain, Relationships, Dominant Drivers

## 1 INTRODUCTION

Construction is a \$7.5 trillion global market, which equates to 13.4% of the world's output. By 2020 this is expected to grow to 14.6% (Global

Construction Perspectives and Oxford Economics, 2009). Interest in and expectations of property, construction and buildings therefore continue to rise internationally (Woudhuysen & Abley, 2004). Yet traditional construction contracting per se remains dominant (RICS, 2007; Oyegoke, et al., 2009), albeit remaining somewhat adversarial and litigious (Brown & Beaton, 1990; Li, et al., 2001). Consequently, industry studies promoted partnering as an innovative approach for managing construction projects as it was perceived that an overhaul of traditional contracting ideologies would bring about a paradigm shift towards a co-operative and caring environment (Larson, 1995). This in turn would then help to reduce conflict (Li, et al., 2001; Cheung, et al., 2003; Chen & Chen, 2007; Yeung, et al., 2007) and foster successful, inclusive, incentivised supply chain collaboration. However as many practitioners and researchers advocated that partnering has gained worldwide popularity (Chan, et al., 2003) with its use ostensibly amplified (Ng, et al., 2002; Chan, et al., 2006; Yeung, et al., 2007), "...we are not yet at the point where collaboration is the norm for the UK construction industry" (NBS, 2013). Further others believed the implementation of construction partnering had actually been conservative and patchy, with only varying degrees of national and international success (Phua, 2006).

Nationally the construction industry equates to 3.2% of the world market and whilst hitherto professed as being in decline (Bower, 2003) it is expected to record only modest progression over the next ten years (Global Construction Perspectives and Oxford Economics, 2009). For whilst sharing many process

similarities with different countries throughout the world, and adept in delivering the most difficult and innovative projects to match any other (Egan, 1998) it has continued with an endemic confrontational culture that has inhibited performance improvement. So with a large number of medium and small sized construction company's (Latham, 1994; Egan, 1998; Li et al., 2001; Wolstenholme, 2009) the UK construction industry remains fragmented, where subcontractors do not contribute meaningfully to the construction process (Akintan and Morledge, 2013). It is also asserted as having a lack of co-ordination and communication, an informal and unstructured learning process, adversarial contractual relationships and a lack of customer focus (Barratt & Oke, 2007). What is more it has under-achieved compared to other industry sectors because of dwindling profits, minimum investment in research and development, inadequate training and low client satisfaction (Li, et al., 2001; Wolstenholme, 2009).

Construction partnering was therefore believed to represent the most significant development as a means of improving project performance and profitability. Moreover, significant benefits can be cited (Akintoye & Main, 2007; Wolstenholme, 2009). However, the industry still continues to use traditional procurement; where design is separated from production and a new team created for every job (Wolstenholme, 2009). So, as a facet of present-day project management dialogue (Alderman & Ivory; 2007), partnering customarily functions as a means for project participants to consider their existing relationships as opposed wholesale amelioration. Therefore, a substantial credibility gap exists between the partnering rhetoric and the way organisations perform in practice (Green, 1999). So as the implications of a fragmented supply chain include high transaction costs, increased requirements for management input and coordination of activities on site, with fewer opportunities to drive out waste or reduce costs (BIS, 2013) debate around the nature and merits of applied partnering remains. Integrated working therefore continues to be an under-utilised concept within the construction industry (Egan, 2002).

## 2 METHODOLOGY

This paper recognises there is a sizable body of literature that has examined in some depth the principles and practices associated with the construction industry's procurement strategy since Simon (1944). Yet it also acknowledges the majority of academic journal papers and the various industry reports, whilst signifying the most important profusion of literature available (Holt, 2010; Fellows & Liu, 2003), invariably represent one shade of opinion on the nature and prospects of partnering. Therefore as the more critical views on the benefits and limitations of long term collaborative relationships have a tendency to be overlooked or ignored (Bresnen, 2007), a meta-analysis approach (Bryman & Bell, 2007) has been adopted. For this quantitative method, in systematically reviewing seminal literature on 'traditional', 'non-traditional' and non-market exchanges (table 1), contrasts and combines results from different studies in order to obtain a better understanding of how construction partnering has actually been espoused. Moreover by considering these critical points of current knowledge and identifying patterns drawn from the factors that have promoted and/or inhibited the development of collaborative involvement, this literature review provides a fresh theoretical insight into cooperative relationships. Moreover by identifying and cataloguing the analytical interpretations of the various study results, this research ventures to ascertain core congruent drivers and agents of change having mapped the perceived viability, efficiency and 'worth' of the project partnering initiative.

## 3 KEY INFLUENTIAL REPORTS

Since the first major broad-based report commissioned by Government into the way projects were procured by clients, Cooke and Williams (2009) believe they have intervened in the construction industry. For the "one mechanism that can be used to coerce and direct an industry is the publication of formal reports" (Murray & Langford, 2003). Therefore the reports identified (figure 1), in some way have encouraged a set of changing relationships between the parties to the construction process (Murray & Langford, 2003).

Table 1: Procurement Variations

PROCUREMENT METHOD	DESCRIPTION
<b>Traditional</b>	Contractor builds to a defined scope of works for a fixed price lump sum. Client retains responsibility for the design and the project team. Contractor appointed 'normally' following a tender process or negotiation and will sign up to a contract for the works.
<b>Non-Traditional</b> (Design & Build, Management Contracting, Construction Management)	<p><b>Design &amp; Build;</b> Client appoints a building contractor who will provide a completed building to an agreed cost and programme. The contractor is responsible for design and construction. The contractor can be chosen through a tender process or through negotiation. Maximum risk is transferred with this method.</p> <p><b>Management Contracting;</b> A fast track strategy which overlaps the design and construction stages and allows early elements of the construction process to be commenced before design has been completed. The management contractor is engaged by the client to manage the overall contract in return for a fee and so can be appointed early in the design to advise on buildability and programming. Whilst there exists a contract between client and management contractor, the contracts for the individual work packages are between the management contractor and the individual sub-contractors.</p> <p><b>Construction Management;</b> A fast track strategy allowing individual elements of the project to be let before the design of later works are complete. The provider will appoint a construction to manage the overall contract in return for a management fee. The project can benefit from early involvement of the contractor. In this process the contracts for the sub-contractors are placed directly between the client and the sub-contractors. The client will need to have a high level of involvement during the design development and construction phases.</p>
<b>Non-Market Exchanges</b> (a term increasingly applied to environments, organisations and exchanges that are also labelled as noneconomic and social)	<p><b>Public Private Partnerships;</b> Created for the provision of services and not specifically for the exclusive provision of capital assets such as buildings. Therefore preferable to investigate PPP's as soon as possible after user need identified. Note the tendering process in this procurement route is expensive and requires negotiation rather than competitive tendering. In comparison with other procurement routes the time from commencement of the project to attaining a start on site is substantially longer. Risks associated with providing the service are transferred to those best able to manage them.</p> <p><b>Framework Agreements;</b> Can be established with single suppliers or with a limited number of suppliers. Frameworks can allow suppliers to be brought together with the relevant expertise and experience which will result in savings to both parties where a number of projects are involved. These agreements can cover different forms of procurement including Design and Build, Traditional, etc. although unlikely to be appropriate for clients that only occasional have projects;</p> <p><b>Project Partnering/Strategic Partnering;</b> involves the main contractor, client organisation and other key supply chain members working together on either a single project or a series of projects to promote continuous improvement. The intention is to produce a 'win-win' situation for all partners by fostering co-operative ways of working aimed at improving performance. Whilst not contradictory to competition partnering can promote better value for money by encouraging clients and contractors to work together, minimising the risk of disputes by avoiding an adversarial relationship.</p>

Adapted from; CIOB, 2002

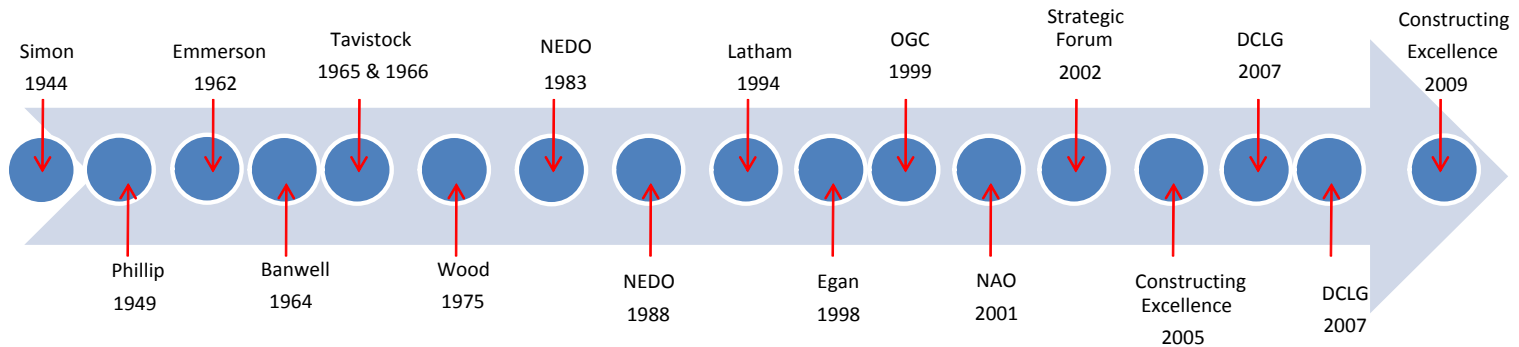


Figure 1: Key UK Construction Industry and Government Reports from 1944.

Whilst the language has changed, a number of the reports published prior to Latham (1994) raised similar criticisms and concerns about the customs and practices of the industry (table 2). Yet they provided only vague generalisations about the performance improvement possibilities and how these could be realised (Murray & Langford, 2003). So accepting the UK construction industry was generally slow to adopt any new principles and practices these earlier reports had "...little influence on either government or the industry over the years" (Cooke & Williams, 2009). This was endorsed by Barrett (2008) who noted none of the reports were acted upon, although "...a number of recurring themes reflect an industry inflicted with long term illness" (Murray & Langford, 2003).

During the 1980's the construction industry profited from exceptional economic growth that resulted in expansion in both size and capacity. Unfortunately a sudden tightening of monetary policy in 1988 initiated the deep recession that not only affected the construction industry in 1989/90 (Hillebrandt et al., 1995; Murray & Langford, 2003) but also impacted on the housing and property markets. While also having an indirect effect on retail and manufacturing due to a lack of customer confidence, a bid low, claim high approach within the construction industry ensued. This created an increasingly adversarial and conflict-driven arena and a growing dissatisfaction by many parties, including Government. Consequently the

then Conservative Environmental Minister, who at that time was responsible for construction, commissioned another joint Government/Industry report with the rationale to end "the culture of conflict and inefficiency that dogged Britain's biggest industry" (Murray & Langford, 2003). This report, *Constructing the Team* (Latham, 1994), in reviewing procurement and contractual arrangements, essentially affirmed and emphasised those previous reports. It therefore concluding the "...fragmented nature, lack of co-ordination and communication between parties, the informal and unstructured learning process, adversarial contractual relationships and lack of customer focus..." were what inhibited the construction industries performance (Barratt & Oke, 2007). Equally the report, regarded the most influential of them all and deemed "a watershed document for the construction industry" (Murray & Langford, 2003), stated the endless refining of contract conditions would not solve the adversarial problems. Accordingly, as a fresh approach was required in respect of the whole construction industry and its habitual struggle, the thrust was for a more cooperative, less adversarial, efficient and profitable industry, with specific, albeit ambitious targets for time and cost savings by set dates. Furthermore Latham (1994) argued a healthier atmosphere, with contracts based upon principles of fairness, mutual trust, and teamwork was vital in order to enhanced performance, rather than the usual adversarial and confrontational lump sum tender (Latham, 1994).

Table 2: Reports Prior to Latham with Recurring Themes; Adapted from; Murray and Langford, 2003

Report	Procurement			
	Contractor Selection	Nomination	Serial Tenders	Partnering
Simon 1944	Character, ability, responsibility, pride in work; for fair remuneration.	Indefinite relationships between contractor & subcontractors nominated by architect. If integral part of design, STC's placed in advance of main contract.	London County Council's sliding fee scale should be used for continuous programmes of work.	Negotiated contracts with builder establishes relationship based on confidence, assuring consultation with architect and builder. Maybe more expensive.
Phillips 1949	-	Only in exceptional cases (highly specialised work) architect nominates subcontractor or obtains separate tenders for work.	-	-
Emmerson 1962	Review how building contracts placed. Open tenders unacceptable.	Nomination needed in appropriate circumstances.	Serial contracts should be used as they reflect the need for collaboration between designer and subcontractor.	Efficiency in building operation dependent on quality of relationship between building owner, professions, architect, surveyor, engineer, contractor & subcontractor.
Banwell 1964	Character, ability, responsibility, pride in work; for fair remuneration & good service. Removal of open tendering. Early selection need not preclude competition.	If early nomination is part of the specialist work, the main contractor should also join the team early.	-	Negotiated contracts not excluded in public field; methods of contracting should be examined for the value of solutions offered to problems rather than orthodoxy.
Tavistock 1965/1966	-	If main contractor nominated early in the building process, then party to subcontractor nomination.	-	-
Large Industrial Sites 1970	Management contracting preferred; reimbursable & negotiated basis.	Clients better served by greater integration of manufacture & install arrangements for specialist equipment	-	Encouragement for clients & contractors to 'partner' with trade unions for mutual benefit of reduced stoppages & labour controlled casual labour.
Wood 1975	Current practices; open competition 16%; select competition 65%; negotiation 14%; two-stage tendering 3%; serial 1%. Percentage of completed contracts surveyed within 5% of contract sum; open 56%; select 58%; negotiation 66%, two-stage 82%. Open tendering to be abolished.	-	Serial tenders give feedback to design team from earlier contracts; serial or continuity tenders used for house building and schools programmes allowing close collaboration. The disadvantage contractor may not act as he did on first contract.	Pure negotiation is appropriate in certain circumstances, but clients may pay more and it will take greater effort by the client to get value for money.
NEDO 1983	Successful fast contracts when contractor chosen not on price but previous performance, with willingness to accept customer's urgent deadline.	Temptation to nominate STC's for design & supply to reduce workload on the designer may lead to disruption of programme; incompatibilities of STC's identified too late, information cannot be incorporated in design.	-	-
NEDO 1988	Choice of the main contractor usually based on competition.	Majority of contractors appointed the specialists 'named' or 'suggested' in tender documents. The short time available to prepare for site operatives made it impracticable to look for alternatives.	Many regular & major customers had established procurement paths, & the expectation of repeat orders motivated the industry.	Where customers established a firm & well defined context for coordinating the contributions & responsibilities of all main participants, can be accomplished in a spirit of confidence & partnering.

Four years after Latham's Report (1994) tentatively alluded to formal partnering for larger construction projects and those with repeat processes (Murray & Langford, 2003) concern was again expressed in respect of the industry under-achieving. Hence with low and unreliable profitability, and the extensive utilisation of subcontracted labour, a seminal "...hard edged...client focused composition" (Murray & Langford, 2003) was bestowed. The report Rethinking Construction (Egan, 1998), in visualising an industry seeking continuous improvement, identified key drivers and noted the importance of team integration. It also contended the industry recognised the need to modernise because of the slow pace of change and innovation, although evidence supporting this view was judged anecdotal. Nevertheless, whilst attracting criticism because none of the appointed 'influential' board members represented the contractor (Green, 1999; Murray & Langford, 2003), it spawned more interest and had more written about it than any of the previous reports. Yet, in laying new foundations that would make the industry more successful, the problems Egan (1998) considered needed a 'make over' were those that had beset the industry for decades, and had been identified in some manner within previous reports (Murray & Langford, 2003, Chan et al., 2006). Therefore with the same industry ills, "the dominant paradigm driving the performance critiques of all the post war reports [was] one of a rationalist model" (Murray & Langford, 2003).

Following the Egan Report (1998), a number of key documents were said to have charted industry reform for the subsequent decade, including Accelerating Change (Egan, 2002); which came some four years after Rethinking Construction (Egan, 1998). The report not only sought to tackle the barriers preventing progression but accelerate the rate of change across the industry (Egan, 2002). Therefore whilst not a new initiative, but a vehicle to build upon and reaffirm the principles set out in Rethinking Construction (Egan, 1998), it opened with "change is already underway" (Egan, 2002). It also alluded to the compelling argument people repeatedly paid lip service to the Egan agenda and failed to embrace the reports true ethos. Then in October 2009, "...a diverse group of industry professionals met on a voluntary basis, with neither the authority of a Government review, nor the support of full-time researchers..." (Wolstenholme, 2009), to again review industry progress.

The report Never Waste a Good Crisis concluded some progress had been made, but "...nowhere near enough..." (Wolstenholme, 2009). For whilst Rethinking Construction (Egan, 1998) had a bearing on the construction industry, which still resonates today, its allegiance was considered skin deep, as the industry cherry picked the behaviours they wished to adopt based on their own self-interest (Wolstenholme, 2009). Moreover clients continued to reinforce fragmentation by using a sequential procurement process (RICS, 2007), which meant abandoning frameworks and reverting back to lowest price tendering (Wolstenholme, 2009). Companies also sought to retain profit for themselves whilst passing risk down the supply chain, rather than sharing profit to eliminate risk for the whole team. Hence, whilst Wolstenholme (2009) reiterated the time had come to abandon existing business models that rewarded short term thinking, because the era of client led change was over (Wolstenholme, 2009), this was met with a modicum of scepticism (Bresnen, 2009; Ross, 2011).

Globally, following the publication of Egan's Report (1998) came similar high profile reviews of the construction industries within various countries including; Singapore (via Construction 21 Steering Committee, 1999); Australia (via Industry Science Resources, 1999); South Africa (via Construction Industry Development Board, 1999) and Hong Kong (via Construction Industry Research Committee, 2001). These reports, whilst inspired by Egan (1998) and therefore deemed superficially similar were themselves activated by local construction industry concerns (Green et al., 2008). So whilst the pre-existing dynamics of change within the contexts of each were substantively different (Green et al., 2008) it had been accepted that the global construction industry was in a crisis and urged to restructure in order to commit itself to building a better future. Hence the espoused intention to attain a radical transformation of construction performance through a planned series of change initiatives would mean "...an integrated construction industry capable of continuous improvement towards excellence in a market driven environment" (Tang, 2001). Still as the outsourcing of labour through subcontractors and other intermediaries was, and remains the norm in most countries, work in construction has become increasingly temporary and insecure. So as major pillars of the national economy, each

respective construction industry generally operates "...under a 'war' model" (Dyer, 2008) due to their fragmented adversarial culture (Tang, 2001). In view of this, whilst "partnering has had a positive beginning with its high profile and/or success stories..." (Chapin, 1994) it remains questionable as to whether this platform will reach its full potential if the global construction industry is left to take care of itself. For whilst it needs to work more collaboratively, with partnering utilised as an effective process to develop reciprocal relationships there has been a proliferation of small or very small firms being employed (Fudge, 2006; Cummings & Jecks, 2004).

#### **4 PROCUREMENT METHODS IDENTIFIED**

The UK construction industry has been continuously criticised for its less than optimal performance and put under sustained and increasing pressure to improve its practices. Hence the need to improve the conventional design and construction process in the construction industry is well reported (Cooper, et.al, 2000). Yet, despite numerous government and institutional reports produced over a 65 year period (Holt, 2010) and a decade-long programme of change (Anvuur et al., 2011; Constructing Excellence, 2006), Egan still pronounced the industry would only be given four out of ten. For whilst conceding the determination of an appropriate procurement strategy at the inception of a construction project was pertinent to success (Naoum, 2003; Constructing Excellence, 2004) the actual circumstance under which a particular strategy or type of contract ought to be used remains ambiguous. Hence, with no general consensus on the most advantageous procurement method (RICS, 2010; NBS, 2013), coalesced with the number of clients who are not habitual procurers of construction work (Constructing Excellence, 2004), the industry has continued its association with traditional procurement (Akintoye & Main, 2007; Murdoch & Hughes, 2008; RICS, 2010). Furthermore, with a general naivety to the functional division of responsibility between design and construction (Bower, 2003; Cooke & Williams, 2009); which has been compounded by transient fragmentation (Alashwal, et al., 2011; Holt, 2010), cost escalation, productivity regression and adversarialism have remained commonplace (Ng, et al., 2002; Vaaland, 2004). Justifiably some practiced clients were purported to favour non-traditional procurement

methods as time and cost savings were professed to being more likely realised when design and construction had been integrated (Clamp et al., 2007).

Still due to the continued disparity, ambiguity and perceived lack of progress in rectifying the construction industry's procurement ills, partnering was ultimately endorsed. For this unique multi-lateral procurement method, which was judged commonplace athwart other industry sectors (Bresnen, 2009; Wood & Ellis, 2005) would ostensibly engender similar benefits as those that existed in aerospace, automotive, manufacturing and retail. Yet, whilst considered a more radical departure from the so-called traditional methods than was non-traditional procurement (Murdoch & Hughes, 2008), it remains unclear as to whether construction partnering was actually intended as a type of contractual arrangement or procurement method, as opposed an approach to procurement. So whilst held by many as the way forward in construction, due to conjecture pertaining to increased returns for all parties concerned (Hamza & Djebarni, 1999), recorded examples of the promoted step change from broadest competition towards an integrated mechanism that incited contractual obligations and collaborative working have remained rare (CII, 1991; Holt, 2010).

#### **5 A PARTNERING DEFINITION**

Partnering has been identified as a widespread part of global construction management practice (Bresnen, 2009, Wood & Ellis, 2005; Chan et al., 2006), duly exploited to capture a spirit of cooperation to improve performance and profitability (Kumaraswamy, 1997; Briscoe & Dainty, 2005; Akintoye & Main, 2007). So whilst "the definitions of partnering in construction vary from one study to another" (Hong, et al., 2012) it has been quoted as the 'master key' to initiate the techniques and principles of total quality management (Hellard, 1995). Yet there is a recognised division between those who see partnering as an informal and organic development and those who regard it as something more indorsed. So with varying interpretations on a number of its features (Hamza & Djebarni, 1999; Green, 1999) and a limited number of tools available to incite effective agreements that lead to performance improvements (Li et al., 2001) considerable uncertainty and

debate exists about the range of mechanisms that partnering encompass (Bresnen, 2009; Nystrom, 2008). Hence partnering practices are generally viewed along a continuum from competition to cooperation, collaboration and coalescence (Thompson & Sanders, 1998; Li, et al., 2001). Furthermore as the presumption exists in today's construction industry that selecting the appropriate procurement system will inevitably lead to a 'successful' project outcome (Tookey et al., 2001) "...reports continue to question the extent to which the principles and practices of partnering have become institutionalised and internalised by construction companies" (Bresnen, 2009; Phua, 2006; Ng, et al., 2002). For organisations approach this procurement method in different ways, which means varying degrees of integration (Briscoe & Dainty, 2005) due to local practices and the particular combination of tools and techniques; albeit "informed by wider discourse and accepted practice within the sector" (Bresnen, 2009). Accordingly as Egan's prerequisite was for competitive tendering to be replaced with long term relationships; a theory first broached by a number of the earlier reports, a rethink has now been provoked due to this theory being conceived as optimistic, realistic and/or altruistic (Kumaraswamy, et al., 2002; Anvuur, et al., 2011).

## 6 PARTNERING'S BENEFITS AND DETRIMENTS

With as much as 75-85% of the gross work done by subcontracted services, the construction industry has invariably operated with differing communities of practice within the many sectors that make it up (Packham, et al., 2003; Eriksson, et al. 2007; Ross, 2011). It has therefore remained predominantly fragmented with most major contractors operating as pliant organisations to the large number of medium and small sized firms whom have their own objectives, goals, management styles and operating procedures (BIS, 2013). So with the main contractor having an almost exclusive focus on the management and coordination functions of a supply chain, this epitomises the hollowed out structure of the conventional construction industry caused by extensive outsourcing (Briscoe & Dainty, 2005). Consequently, construction partnering necessitates crucial adaptations to business approaches and practices (Schultzel & Unruh, 1996) due to the deeply ingrained attitudinal and behavioural characteristics. It is therefore accepted any move from the

traditional adversarial, arms-length relationship, towards mutual trust and understanding (Green & McDermott, 1996; Thurairajah, et al., 2006), compels substantial and potentially profound cultural changes within and between organisations. For construction partnering has been advocated as a way of developing more integration between organisations (Cox, 2004; Ross, 2011) and thereby reducing the distance between firms through improved communications out of early (and continuous) collaborative involvement. This in turn is said to consummate greater mutual obligations that establish trust and the alignment of systems and processes (Bobby & Macbeth, 2000).

Conversely construction supply chains have invariably existed for the duration of a single project (Briscoe & Dainty, 2005). As a consequence, many industry participants have implemented short term views on business development, with little interest in bettering their long term competitiveness (Chan, et al., 2006). The full benefits of partnering have therefore been ostensibly missed as it was ventured this took time and the experience of several projects for the full benefits to be accomplished (Bennett & Peace, 2006). Moreover while single schemes do characteristically realise fractional benefits, given the team learn on the job (Thomas & Thomas, 2005), these benefits are rarely filtered down the supply chain to the lower tiered sub-contractors (Packham, et al., 2003; Briscoe, et al., 2004). These subcontractors were also unable to increase profit margins by negotiating favourable rates from suppliers, as well as being apprehensive of litigation, non-payment by their upstream clients and their potential exploitation due to risk apportionment (Davey, et al., 1998). Predictably with a focus on the relationship between client and main contractor (Eriksson et al., 2007) many subcontractors would prefer to "stick to what they know" (Miller, et al., 2002; Eriksson et al., 2007), which is a reliance on complete contracts rather than cooperative relationships with main contractors (Pietroforte, 1997; Eriksson, et al., 2007).

Evidently the plethora of reports on construction partnering serve as a reminder this is not an easy option and must be worked at by everyone involved, from the "...suppliers' supplier to the customers' customer...", and throughout the organisations, if the full benefits are to be realised (Wong &



Cheung, 2004; Briscoe, et al., 2004). Yet with the potential lack of communication as a notable obstacle in traditional procurement, the top three major benefits of partnering have been identified as; - improved relationships between project participants; better communication; and enhanced productivity (Chan, et al., 2006). In contrast the top three major difficulties of partnering were perceived as; - dealing with large bureaucratic organisations; uneven levels of commitment among the project participants; and parties being faced with commercial pressures that compromise the partnering attitude (Chan, et al., 2006). Moreover half the schemes that cite partnering fail to include the relevant components during the project (Nystrom, 2008) including the public sector, where procedures often work against open relationships (Woodrich, 1993; Ng, et al., 2002). Yet with open communication deemed a primary strategic weapon in countering problems (Chan, et al., 2006) the term partnering has been used to capture a spirit of cooperation that may occur on any type of project (collaborative or otherwise). However companies are prone to depart from this collaborative ideal due to an unwillingness to commit fully to closed long term relationships. For this impedes the upstream supply chain partners taking advantage of price competition, more favourable deals from alternative suppliers and the commercial realism that necessitates firms have alternatives and many customers. So given a building project is completed as a result of a combination of many events and interactions, any selected procurement method endures changing participants and processes that are within a constantly changing environment which is temporary, fragmented and short term (Chan et al., 2003). Hence with the benefits attributed to partnering ostensibly being equally well provided by different arrangements (Bennett & Peace, 2006; Nystrom, 2008) the concept of project success utilising partnering as a procurement method remains ambiguously defined.

## **7 DISPUTE MANAGEMENT**

As previously noted the Latham Report (1994) was considered the construction industries defining moment. For it was deemed the start of a fresh approach in tackling the adversarial and conflict driven business environment caused by the 'bid low, claim high' tactic (Murray & Langford, 2003).

However, whilst roused during the 1989/90 recession, it has been purported the construction industry still exists within an adversarial society (Briscoe & Dainty, 2005). For although the case was argued for improved management practices that would result in better integration across the different tiers of the construction supply chain, the reality has been difficult to achieve (Briscoe & Dainty, 2005). The general consensus therefore subsists that the nature of the construction process makes conflict inevitable in some form and to some extent (Kumaraswamy, 1997). So as Briscoe and Dainty (2005) assert other industry sectors have made noteworthy progress towards more efficient and closely integrated supply chains, it is affirmed fewer industries suffer more from conflict than construction (Black, et al., 2000).

As a consequence, considerable research has been undertaken seeking to determine the reasons for construction adversarialism including pragmatists Fenn and Gameson (1992) and Kumaraswamy (1997); although they respectively differentiate between conflict and dispute. Nevertheless these papers are a rational view that invariably concentrates on management rather than suppression, avoidance or even the reduction of conflict. Hence their basic requisite for successful conflict management is deemed diagnosis and intervention (Rahim, 2002). Yet, whilst emphasising conflict management does not start when a dispute first raises its ugly head (Revay, 1993), the long term strategists, including Turner-Wright (1992) and Colledge (1992), do not find the inevitability of conflict a positive or fruitful subject. Therefore they concentrate on the negative consequences such as diminishing project performance levels induced by non-interaction, frustration and non-aligned perceptions of each other's and the projects goals.

In essence construction conflict is said to emerge from the way the industry functions. For despite an organisational structure and relationship pattern being produced, the collection of diverse professions, specialists and suppliers, which are commonly temporary (Murdock & Hughes, 2008), is deemed an adverse feature of the industry (Hellard, 1995). Hence inefficiency has customarily been considered a way of life (Murdock & Hughes, 2008) and an inevitable consequence of the economic, technological and sociological environment. It was also said short term relationships are a principal source

of adversarial attitude within the project team (Kenneth, 2006), as well as a natural constraint to efficiency and innovation. Consequently whether termed destructive or constructive (Kumaraswamy, et al., 2007), the causes of conflict in construction remain numerous, and trying to identify a specific derivation is not possible because of the complexities associated with the prospective procurement methods (Love, et al., 2010). However as contracts generate dispute because of the externality of interpretation (Clegg, 1992), the choice of an appropriate procurement method, as an avoidance technique is decisive. And whilst certain types can be said to elude particular conflicts (Rahim, 2002) it is not only the type of procurement method chosen that may be pertinent to conflict avoidance, but the substance and indeed the spirit of the contract (Cheung & Yiu, 2006; Love et al., 2010).

## **8 OTHER SECTORS AND CORE PARTNERING INITIATIVES**

Partnering in construction has to some extent drawn heavily on lessons learned from other industry sectors (Barratt & Oke, 2007), including aerospace, automotive, manufacturing and retail. Within these industry sectors the critical roles of supply chain collaboration and management have long been recognised. Consequently there is a wish to see the construction industry convey its products to its patrons in the same way as the leading consumer-lead manufacturing and service industries (Egan, 1998). Yet many industry professionals have struggled with the comparison because the interpretation was deemed too literal. This inevitably led to the protest “but it’s different for construction” (Wolstenholme, 2009). Consequently “construction punches well below its weight by comparison with other business sectors” (Wolstenholme, 2009). For whilst the origins of lean supply operations are well documented (Simons et al., 2004) there is a lack of universal definition of supply chain management (Holweg et al., 2005). This in part, is due to the multi-disciplinary origin and evolution of the concept and the abundance of overlapping terminologies (Simons et al., 2004). As inter-firm supply relationships manifest very different aspects when sectors of commerce and industry, and indeed, different products within one sector, are analogised (Lamming, 1996).

Supply chain integration has the potential to improve profit and competitive position, due to improved supply chain operations over longer periods with fewer strategic suppliers. Therefore it can be seen as a potential source of substantial competitive advantage (Dyer et al., 1998; Esmaili & Zeepongsekul, 2010). Still, the intricacy of relationships within a supply chain, and the number of features that need to be understood and managed to boost its amassed worth, provides a significant challenge. So although there is corroboration and benefits accrue for advocates of close relationships, initial attempts have not always brought the anticipated prizes (Lamming, 1996). Yet supply chain management is costly to set up and maintain while potentially reducing the customers’ ability to switch away from inefficient suppliers. So while supply chain management practices within manufacturing are widely used main stream implementation across industry sectors has been much less prominent (Holweg, et al., 2005). Moreover research has suggested a “one size fits all” strategy for procurement is ineffective and firms should be analysed strategically to determine the extent to which a supplier’s product contributes to the core competence and competitive advantage of the buying firm. For empirical studies have shown the supply chain decisions and behaviour of Japanese firms, including Toyota and Nissan, have realised the benefits of both partner and arms-length models and so strategically segment their suppliers. This converges with those of their U.S. counterparts as both countries manage a portfolio of relationships (Bensaou, 1999) in order to deal with the relevant individual settings. Therefore with dual or multiple sourcing being common business practice, good practice means properly balancing and effectively managing that supply chain whilst adapting to product and market conditions. Hence “...organisations cannot manage with only one design for all relationships” (Bensaou, 1999).

In respect of universal applicability and appropriateness of lean supply within the various sectors, the key fundamental variables are identified as trust, which is earned over time albeit evolving slowly as a result of a successful history of performance, and the complexity of relevant contracts (Hoyt & Huq, 2000). Still buyer dominance remains evident (Simons, et al., 2004) although how this supremacy is exerted and the resultant effects can be quite dissimilar. For in the automotive sector; and in particular Toyota, high levels

of trust have developed over many years which has led to low levels of buyer opportunism. Yet a history of opportunistic buyer behaviour within the food retail sector has resulted in low levels of trust, coupled with low contract complexity (Cox, 2004). So as Li, et al.(2001) identifies partnering has four dimensions , some company policies still require the implementation of a tender bidding process. And while suppliers invariably accept the tendering position and attempt to build relationships after the contract is won (Donaldson, 1996), this conflicts with the ethos and operation of relationship building. So while major retailers publicly talk of developing partnerships with dominant branded manufacturers (Ogbonna & Wilkinson, 1998) the concept for supply chain collaboration is not as well utilised as it potentially could be (Holweg, et al., 2005). Therefore with buyer dominance evident (Simons, et al., 2004) is partnering a deep-seated change in attitude or a more calculated and superficial response to particular market conditions (Bresnen & Marshall, 2002)?

## 9 RESEARCH FINDINGS AND DISCUSSION

This critical literature review allied to better integration and synergic team working within the construction arena offers analyses of the partnering paradigm that has succeeded other industry sectors, since the mid-1980's (McGeorge & Palmer, 2002). In doing so it identifies a long stream of UK Government backed reports which criticise the construction industries "less than optimal performance" (Barratt & Oke, 2007). It also highlights the need for "improved relationships between project participants" (Bresnen & Marshall, 2000) with the construction supply chain being an area that could contribute to this improvement in performance (BIS, 2013). Yet with conflict, adversarial attitudes and mistrust deemed intrinsic to the traditionally procured construction project pre 1994, there has been an overwhelming failure to act upon the recommendations made in those early reports. However within an industry still habitually seen as embattled (Barratt & Oke, 2007), the reports published during the 1990's recession were the ones that aspired a cooperative environmental strategy in order to realise the amicable completion of construction projects. For with the prevailing view being an ever increasing failure rate of major projects, Egan (1998) stated the

construction industry rather than improve was to do things entirely differently. Thus the aim was to revolutionise the traditional practices by entering into long term partnering relationships throughout the supply chain.

This paper also acknowledges no general overall agreement has been attained and therefore partnering remains universally undefined (Bygballe, et al., 2010; Bresnen, 2009). Furthermore the definitions academics and professionals impose to classify procurement routes are too prescriptive to be meaningful (Tookey et al., 2001). So in accepting all construction projects are different with diverse configurations in relation to their specific features (Ankrah et al., 2009; Ross, 2011), it is acknowledged partnering rests heavily on its metaphorical properties and so represents a particular language (Alderman & Ivory, 2007). So as partnering requires planning and a dependency on changing behaviours (NBS, 2013) this has provoked critique from both practitioners and the research community, as it may actually represent nothing more than a return to good relations, honesty, integrity and cooperation (Hellard, 1995). So whilst Radeneck (2008) advocates the construction industry has never really existed as a coherent entity, the majority of building contracts in this country continue to use traditional procurement (RICS, 2007). In addition whilst contractor selection methods are varied, selected competition remains the most prevalent (49%) followed by open competition (37%) (RICS – Cobra 2010). So whilst hybrid organisational structures are purportedly becoming increasingly common, albeit for experienced clients only, the primary selection mechanism remains price (Davey et al., 1998). Furthermore with academic descriptors and expectations not adequately conceptualising reality, due to each procurement route having its own proponents and inherent strengths and weaknesses (Tookey et al., 2001), no individual procurement system appears uniquely suited to deliver the necessary controls and best practice arrangements in modern construction (Tookey et al., 2001).

What's more awarding contracts to the company who offers the lowest price encourages firms to submit a low bid only to claw back profit. This increases the likelihood of litigation and a breakdown of trust in the current and any future relationships. Hence the challenge remains to incite a healthier

atmosphere throughout the supply chain. For as a whole, the industry continues to perform unsatisfactorily (Yeo & Ning, 2002). So while construction partnering has been identified as a means to this end (Murray & Langford, 2003), the object of getting a procurement system that delivers project success in spite of the problems imposed by the procurement route, remain. For as Tookey et al. (2001) identifies, the development and operation of an organisational structure comes about in spite of the selected procurement route rather than because of it. Yet, while the concept of project success has been explored by a number of researchers including Munns and Bjeirmi (1996) and Lim and Mohamed (1999), no general agreement has been attained. For project success, whilst remaining a relative concept, means different things to different people. Each industry, project team or individual also has their own definition of success, with owners, designers, consultants, contractors and sub-contractors having different project objectives and criteria for measuring success.

Therefore having acknowledged the plethora of reports reproaching procurement methods invariably focus upon the client and main contractor interface (Eriksson et al., 2007), there remains a lack of empirical research investigating supply chain relationships in construction (Ross, 2011; Bresnen & Marshall, 2000; Cox, 2004; Cox & Townsend, 1997; Dainty, et al., 2001; London & Kenley, 2001). Moreover Bresnen (2007, 2009) observed "...abstract and stylised models of partnering in theory...do not necessarily provide realistic models that clients and/or contractors can readily implement in practice". So by synthesising seminal, albeit theoretical literature on 'traditional', 'non-traditional' and 'non-market' exchanges, not only are the construction industry's procurement methods identified but the project partnering initiative is substantiated. Still by attaining a comprehensive, unbiased understanding of the subject area, it is inferred partnering continues to be a paradox (Easterby-Smith et al., 2002). As a consequence, and in an endeavour to make a positive difference, this literature review by cataloguing the analytical literature constituents associated with the various individual aspects of partnering, has fashioned eight dominant partnering drivers (figure 2). In turn, these eight mutually inclusive factors help delineate good partnering practice because each is considered a dynamic component aimed

at developing supply chain collaboration; both up and down stream. The following table (table 3) identifies each dominant partnering driver along with clarification as to why that particular element irrefutably strengthens construction partnering.

Reports including Banwell (1964), Latham (1994) and Egan (1998) advocated partnering and strategic partnering arrangements as they influenced project performance. Unfortunately this was for experienced clients and larger organisations only (Wolstenholme, 2009). It was therefore contended construction could seek improvement by "...recasting relations between actors in projects..." (Alderman & Ivory, 2007) and by learning as much as possible from others who have done it elsewhere (Egan, 1998). For construction was considered no different from manufacturing. However, Fox et al., (2002) claimed building design was often customer led and customer led design often resulted in bespoke and tailored goods whereas producer-led design, as manufacturing was, often resulted in standard and custom goods. Still, the UK construction industry was asked not to "look at what it does already and do it better", but "join with major clients and Government to do it entirely differently" (Egan, 1998). Thus a rationalising of the supply chain was said to result in an integrated project process, with the use of collaborative, more open, less managerial and less hierarchical relationships which would be based on trust rather than resting on contracts. Hence preferred suppliers would grow in size by "...hovering up those competitors who do not make the tender stage..." (Murray & Langford, 2003). This in turn would mean a radical change from the traditional model of project delivery. For the use of long term relationships would not only reduce the need for tendering and focus clients on requesting value for money rather than lowest tender, but render formal contractual documents obsolete (Egan, 1998; Murray & Langford, 2003).

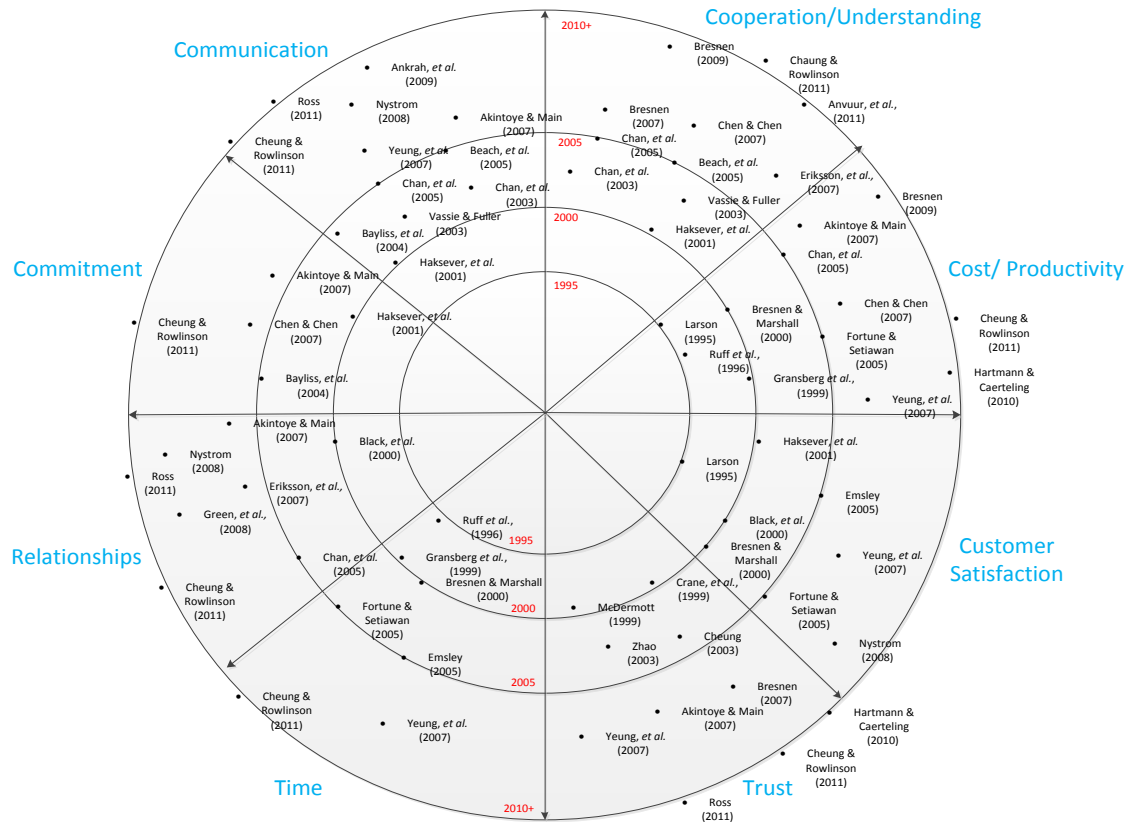


Figure 2: The Establishment of Eight Dominant Drivers

Table 3 Dominant Driver Clarification

Dominant Driver	Clarification/ Rationalisation
1. <b>Commitment</b>	To make partnering work the attitude of the participants remains fundamental as it is not a contract but an attempt to establish non-adversarial working relationships among project participants through mutual commitment and open communication (Cheung et al., 2003); in the contractors opinion the most important factor for successful collaboration is senior management's close involvement in the process (Akintoye & Main, 2007); the success of long-term co-operation is highly dependent on cultural and attitudinal factors displayed by the participants (Akintoye & Main, 2007); it has been shown the degree of match and mismatch between organisational culture and structure has an impact on staff's commitment level (Cheung & Rowlinson, 2011)
2. <b>Communication</b>	Supply chain management has been advocated as a way of improving communication (Ross, 2011; London & Kenley, 2001); partnering should include all members of the supply chain (Larson & Dexter, 1997); co-operation among construction project participants requires good communication (Akintoye & Main, 2007); positive correlations are found with the level of personal acquaintance and the extent of productive and satisfactory relationships, implying the better both parties know each other on a personal basis, the more productive and satisfactory is the relationship (Chaug & Rowlinson, 2011).
3. <b>Cooperation/ Understanding</b>	Supply chain management has been advocated as a way of engaging early collaborative involvement as well as the alignment of systems and processes (Ross, 2011); Partnering advocates co-operation contracting where information and risk are shared as appropriate (Cheung et al. 2003); Cooperative teamworking offers greater chance to achieve project objectives (Cheung et al. 2003); undefined roles and responsibilities is the fifth highest contributing factor to unsuccessful collaboration (Akintoye & Main, 2007);
4. <b>Cost/Productivity</b>	Benefits derived from increasing the proximity of relationship with suppliers can be economic and relate to the quality of service; Akintoye et al.'s (2000) survey identified the benefits noted by the contractors were increased profitability and cost reductions within organisations; partnering provides benefits to the contracting parties including cost effectiveness (Cheung et al., 2003); on the power of partnerships a clear advantage is the improved quality and productivity (Akintoye & Main, 2007);
5. <b>Customer Satisfaction</b>	"Benefits derived from increasing the proximity of relationship with suppliers can...relate to the quality of service" (Ross, 2011); Akintoye et al.'s (2000) survey identified the benefits noted by the contractors were those to the client and improved customer service; collaboration can have a substantial positive impact on project performance with regard to improved client satisfaction (Akintoye & Main, 2007);
6. <b>Relationships</b>	The goal for partnering is to improve relationships among contracting parties (Cheung et al., 2003); construction firms value the connections made with their supply chain (Ross, 2011); there is a positive and strong association between economic performance and the quality of relationship (Kale & Arditi, 2001); supply chain management has been advocated as a way of developing more integration between organisations (Cox, 2004); for any collaborative arrangement to work, relationships between parties need to be good (Akintoye & Main, 2007);
7. <b>Time</b>	Collaboration can have a substantial positive impact on project performance with regard to time (Akintoye & Main, 2007); relationship management brings professionals from different industry groups together which provides a setting for knowledge sharing and innovations which lead to time and cost savings (Chaug & Rowlinson, 2011);
8. <b>Trust</b>	Supply chain management has been advocated as a way of establishing trust (McDermott, 1999); trust building is an indispensable exercise of partnering (Cheung et al., 2003); a lack of trust was rated the second highest failure factor, as relationships fail without trust (Akintoye & Main, 2007); while there are many examples given of the creation of trust and co-operation, there are also many examples where this development is, at best, fragile and, at worst non-existent (Bresnen, 2007).

Consequently as partnering was widely advocated to rectify the adversarial contractual relationships that jeopardised the success of many projects, the following relationship schema maps the fabric, reliance and disengagement

perceived to exist within the present-day construction industry (figure 3). In so doing, it not only captures the tangential influences that strive for

successful, inclusive and incentivised supply chain collaboration but annotates the encumbrances.

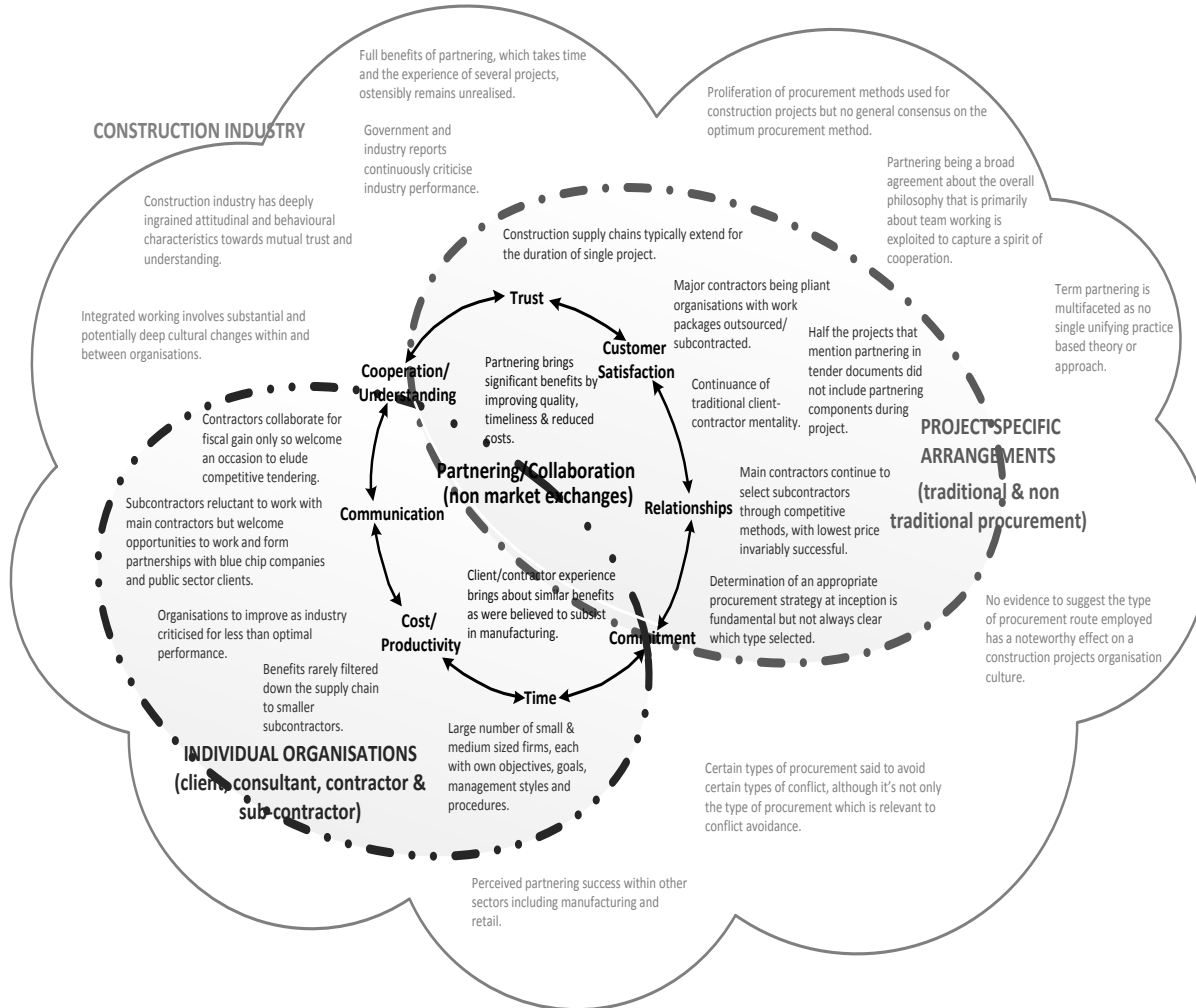


Figure 3: Key Partnership Relationships and Drivers

Thus the construction industry, depicted as a peripheral cloud encompasses two correlated ellipses that represent the dependencies 'Project Specific Arrangements' and 'Individual Organisations'. The first ellipse encompasses the practical issues associated with each particular project whereas the second compiles the issues around relevant contemporary practices and literal apprehensions. Where the two ellipses converge this is entitled 'Partnering/Collaboration', and represents the rationalisation for construction partnering. Moreover, delimiting the convergence are the eight mutually inclusive dominant partnering drivers which are the essential ingredients that must be present in order to successfully influence the implementation of tangible partnering.

## 10 CONCLUSION

This paper critically reviewed extant literature on 'traditional', 'non-traditional' and non-market exchanges; particularly through partnering, within the construction industry. In so doing, irrespective of key influential reports continuing to address the issues of derisory performance and productivity, it attests the continuance of a traditional or non-traditional client-contractor mentality. So whilst endorsing a "...move away from models that encourage short term thinking... in favour of ways that incentivise long term value creation" (Wolstenholme, 2009) the industry has not proactively exploited the partnering recommendations identified within any of the key influential reports, in order to influence improvement (Murray & Langford, 2003). Hence most experienced clients remain satisfied with their own alternative ways of distributing risks (Oyegoke et al., 2009) while those who are not habitual procurers of construction work persevere with traditional methods of procurement (RICS, 2010; RICS, 2007). This primary data collection strategy therefore concludes conflict, adversarial attitudes and mistrust persist as conjectural partnering is typically exercised on the larger projects, between the upper tiers of the supply chain and when repeat processes are involved. Moreover as construction partnering does not have a solid theoretical or empirical foundation it remains a confused and underutilised concept with no formal mechanism in place to 'engineer' collaboration. Hence partnering is not any easy option and must be worked

at by everyone involved in order to infuse successful, inclusive, incentivised supply chain collaboration. For this reason the notion of an initial stylised model that identifies and gratifies the eight mutually inclusive dominant drivers is judged not only necessary, but achievable.

Consequently, and in order to develop this knowledge, having understood the 'what', the next step will be to place more emphasis on exploring the 'how' and 'why' (Saunders et al., 2007). For as construction partnering is not currently a favoured procurement method the facts, theory, alternatives and ideals will now be compared and contrasted within the workplace in order to gain a better understanding of empirical partnering. Hence supplementary exploration, by utilising a combination of inductive search and deductive reason (Orton, 1997), will not only take a 'being ontology' approach (Chia, 1995), but "...conceptualise the context within which change is instigated and focus on continuous processes of flux and transformation..." (Green et al., 2009). For this will establish, with the greatest possible certainty, the researcher's knowledge of reality and the status of that knowledge in respect of practical partnering.

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