PROJECTS: WHERE STRATEGIES COLLIDE

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Projectification of the organisational world has resulted in apparent agreement that projects and project management are an efficient means of implementing organisational strategy. By way of a significant critique of the literature, this paper seeks to explore the content, limitations and inherent problems of strategic alignment, particularly within the construction sector. The paper is presented in three main sections. The first section attempts to bring clarity to how projects and project management are defined. This is complimented with an exploration of the connections between projects, project management and organisational strategy. The second section explores and deconstructs the assumptions underpinning the concept of strategic alignment. The final section of the paper presents a discussion and a number of research propositions regarding strategic alignment in the context of the construction sector. The paper concludes with a model of strategic collision that contradicts and challenges the current assumptions and orthodox view presented in the literature.

KEYWORDS: Strategic Alignment, Project Strategy, Project Management Strategy.

INTRODUCTION

Since the 1990's the growth in project management practices outside the traditional heartland of construction and engineering into mainstream management has been rapid. Both industry and academic reports confirm that the major adoption in project management practices is set to continue as firms begin to focus more of their operations in the form of projects (KPMG, 2002, KPMG, 2005, Smith and Winter, 2005). Significantly, the UK government have placed project implementation as a key strategic directive by creating centres of excellence to improve programme and project delivery within the Civil Service (OPSR, 2003). No longer is project management confined to product creation, rather business transformation, continuous improvement, organisational change, value creation and strategy implementation (Winter et al., 2006b, Winter et al., 2006a, Maylor, 2001). As a consequence, the concept of project management has become so widespread that commentators have began to speak of the *"projectification of society"* (Lundin and Soderholm, 1998, Midler, 1995), defined as 'the growing colonisation of all quarters of life by project-related principles, rules, techniques and procedures to form a new 'iron cage' of project rationality' (Cicmil and Hodgson, 2006).

Despite this, researchers appear to agree that projects are an efficient means of implementing strategy (Cicmil and Hodgson, 2006, Gareis, 1991, Cleland and Ireland, 2006, Roberts and Gardiner, 1998, Turner and Keegan, 1999). By employing a project management approach to delivering the broad organisational strategies, businesses are able to partially eradicate the

traditional bureaucratic, mechanistic structures, which according to Burns & Stalker (1994) are inherently resistant strategic change. One perspective in literature assumes that the project management approach enables organisational strategy to be implemented efficiently and effectively, thus shorting the time from strategy formulation to strategy implementation (Hauc and Kovac, 2000, Gareis, 1989, Partington, 1996). Central to this perspective is the concept of strategic alignment. This concept ensures that projects accurately reflect the organisations long-term investment and aspirations articulated in their organisational strategies. However, projects represent a context within which numerous organisations simultaneously seek to ensure that their broad organisational investments and aspirations are realised. This paper therefore seeks to explore the use of projects and indeed project management as a way to implement organisational strategies. The paper also identifies the content and limitations of strategic alignment and the problems inherent in connecting this concept to how organisational strategies can be realised within the context of construction projects.

The paper is broken down into three main sections. The first part of the paper attempts to bring clarity to how projects and project management are defined. This is complimented with an exploration of the connections between project management *per se* and organisational strategy. The second part of the paper explores and deconstructs the assumptions underpinning the concept of strategic alignment. The final part presents a discussion and a number of research propositions regarding strategic alignment in the context of the construction sector.

PART 1: PROJECTS AND STRATEGY

Projects as temporary organisations

Most mainstream management text tend to refer to definitions provided by PMI (2004), who define a 'project' as "*a temporary endeavour, undertaken to create a unique product or result*" Within this classic description the role of the project is that of a production function, where projects are characterised as a set of planning and control techniques aimed at delivering project objectives - time, cost quality and scope. However, viewing the project in terms of tools, techniques and outputs makes basic assumptions about the nature of projects and arguably diminishes the complex role of the project manager (Lundin and Soderholm, 1995). This also does not adequately reflect the actuality of projects, in terms of the complex social process, the unpredictability and the collaborative interaction among diverse project participants (Cicmil et al., 2006). Notably, the most basic deficiency within this widely accepted definition is the view that all projects are fundamentally similar, in that they are manageable by a universal set of project management activities (Shenhar and Dvir, 1996). Organisations in the construction sector collectively engaged on a single project may bring multiple interpretations regarding what the *unique product* is meant to be and indeed what constitutes a *result*. This will be arguably heavily influenced by their respective organisational strategies and institutional context.

With respect to organisational strategy, projects are typically viewed as a vehicle for change within an organisation where project objectives are determined by a single parent organisation. In considering the complexities of project management, it is perhaps more appropriate to view a project as an 'organisation' rather than a 'tool'. By, referring to the project as a 'temporary

organisation' introduces many of the elements of project management. These include dealing with the conflict of interest between the various stakeholders; realising the role of the project manager and the implementation of information, communication and monitoring systems (Turner and Muller, 2003). Packendorff (1995) also proposes that a change in metaphor from 'project' to 'temporary organisation' means that traditional concepts of planning and control techniques become less important. Instead, problems with the rationalistic belief that the project tasks are clearly defined and unambiguous by a parent organisation become exposed. The following section begins to explore the dominant rationality inherent in project management. This is highly influential in bringing clarity to Packendorff's (1995) critique and the way in which project management and strategy have been woven together.

Project management: streams of research

It has been suggested that project management research has evolved in two stream (Söderlund, 2002). The first stream focuses on the mathematical approach of planning and control techniques developed in parallel by both the US Department of Defence (DoD) and the chemical industry between 1958 and 1959 (Morris, 1997, Siemens, 1971, Archibald, 1987, Fondahl, 1987). These efforts resulted in two of the most important early contributions to project management research, most notably the development of Programme Evaluation and Review Technique (PERT) by US Navy Special Projects and the Critical Path Method (CPM) by E.I du Pont de Nemours Company. On the apparent successful application of these techniques other systems based tools were introduced by the US DoD, including Work Break Structures and PERT/cost.

However, many of the techniques used at this time were developed on an *ad hoc*, trial and error basis, rather than being a deliberate management activity (Thomas, 2006). It was in fact only due to the efforts of the US DoD themselves, that the concept of Project Management became well publicised, with CPM and PERT being the fundamental models of the concept. In order to ensure a generic method of scheduling the DoD forced its customers and contractors to adopt the newly developed methods by publication of DoD/NASA PERT/cost guide (1962). Despite these efforts and initial plethora of published articles on quantitative approaches, by the mid-60's the reaction of defence contractors to the use of the new techniques was decisively negative (Archibald, 1988). From a financial perspective, customers were beginning to realise that the restrictive systems resulted in expenditure of considerable cost and effort by the contactor (Kerzner, 2003). It would also appear that researchers themselves were beginning to question the underlying contribution of such rational techniques to the success of projects (Avots, 1969, Avots, 1962)

In recognising that managing projects requires more than a toolbox of planning and cost control techniques, a second stream of project management research began to evolve, which considered the human dimension of projects. Cleland and Ireland (2006) identify two seminal papers that were influential to this new stream. Firstly, the much cited paper published in the Harvard Business Review by Gaddis (1959), was the first to introduced the concept of project management as a recognised job description, outlining the leadership and responsibility role of the project manager spanning across organisational boundaries. The second significant contribution, also published in the Harvard Business Review described the growing trend in contemporary organisations towards functional teamwork approaches in organisational design (Fish, 1961). Coincidently, the contingency approach to organisational structures was also being

developed during this period (Lawrence and Lorch, 1967), which had an influence on research into temporary organisations, with significant interest paid to the benefits of creating project teams from varied departments to form matrix structures (Knight, 1976) and research into varied leadership styles (Vroom and Yetton, 1977).

Regardless of efforts to focus on the 'softer' aspect of project management through these studies, much of the techniques developed and refined during the latter part of the twentieth century were still rooted in the scientific, systems approach. Mainly driven by the swift developments in computer-based technology, terminology such as project control systems, project risk analysis, and project information and communication networks became synonymous with the practice of managing projects. With reference to the evolution of the discipline, these streams of research have been more or less influential in shaping modern project management thinking and practice. This is further explored in the next section of the paper and helps to locate the underlying epistemological assumptions of project management.

Evolution of a Discipline

It was probably not until the 1980's that Project Management became formalised as a recognised discipline. In reaction to successive project failures in the public sector, authoritative bodies began to standardise project management by following the traditions of The US DoD in the 1960's. The UK Government introduced sophisticated project control methodologies in the form of Projects in Controlled Environments (PRINCE) developed by the Central Communication and Telecommunications Agency (CCTA) in 1989. This was followed by PRINCE2 in 1996 in response to practitioners' criticisms that PRINCE was too demanding, ridged and solely applicable to large projects. However, the most influential movement in terms of establishing a project management discipline came from the formation of the Project Management Institute (PMI) who sought to homogenize the practice by developing generic sets of standards in the form of a Project Management Body of Knowledge (PMI, 1987). The aim of these guides were two fold; firstly to formally standardise the growing discipline of project management by presenting a set guidelines that are deemed to be best-practice; and secondly to accommodate the widening discipline of project management by presenting a generic set of tools and management methods. Although, criticised for its mechanistic process and instrumental rationality (Hodgson and Cicmil, 2006), it is this body of knowledge that underpins project management professionalism today, but more significantly it is the various project management bodies of knowledge and their emphasis on a standardised rational approach that underpin project management teaching across universities.

It should therefore be of little surprise that the discipline of project management detracts little from its rational deterministic origins. This dominant allegiance has survived significant criticism of its '*hard paradigm*' (Pollack, 2007) and recognition that traditional project management discourse lacks relevance to current business practice (Packendorff, 1995, Maylor, 2001). A large number of these concerns have recently been raised by the "Rethinking Project Management: EPSRC Network 2004-2006" (Winter and Smith, 2006), whose main concern is the assumption in main stream project management literature that a single theoretical base exists to adequately explain the actual management of projects (Winter et al., 2006b). Whereas other researchers suggest that project management suffers from the absence of a theoretical framework

and lack of epistemological context altogether (Anagnostopoulos, 2004, Kalfakakou and Zapounidis, 2004). Notwithstanding the timely debate and emerging thinking within the field, mainstream project management rhetoric surrounding rational deterministic techniques continues to grow as the field of project management widens.

Without doubt, 'Project Manager' and 'Project Management' have become fashionable terms within most organisations. There also appears to be a misguided belief that loose implementation of project management principles provides a solution to the inherent problems of executing change. Yet without significant research and recognition of the current limitations behind the discipline, project management is in danger of being labelled a 'fad' and interest into the subject following the bell shaped curve of Abrahamson's (1996) management fashion model. According to the theory, many managers appear to believe that constant progress is being made by the adoption of new management techniques, which are fuelled by the growth in business media that markets itself by satisfying management interests in management fashion trends (Bamber, 2000). The influence of popular management press is salient to the problem, as it is suggested that it tends to lead to the dissemination of progressive management rhetoric, with the dissemination of academic research lagging behind (Barley et al., 1988).

The rigid allegiance to the assumptions underpinning the first stream of research and the underlying rationalistic epistemology holds significant consequences for any attempt to connect project management with the wider field of organisational strategy. Similarly, the exploration of attempts to strategically align the formulation of organisational strategies with the implementation through projects and project management is significantly problematic.

Organisational Strategy

Unlike like the term 'project', literature offers no universally accepted definition of the term 'strategy'. In fact, Shirley (1982) deducts that there are almost as many definitions of strategy as there are writers about the subject. A number of authors have attempted to undertake the task to trace the evolution of strategy concepts over time and, nearly all find significant differences between concepts (Bracker, 1980, Hofer and Schendel, 1978, Evered, 1983, Henderson, 1989). Despite the differences, more often, strategy is defined in terms of formation and planning, with little emphasis on implementation. This separation of formation and implementation derives from the influential design school of strategy (Chandler, 1962), where a scholars such as Hoffer & Schendel (1978) and Andrews (1971) present models of strategic formation that purposely exclude an implementation phase. Andrews (1971) proposes that strategic formulation should be a deliberate process of conscious thought, and suggests that it is only once the strategy is fully formulated and made explicit that it can be implemented. Therefore, the assumption within this school, is that implementation frameworks are developed on clear communication of strategic intentions and objectives, against which operational managers devise their own targets and plans (Hrebiniak and Joyce, 1985).

Rather than treating strategy as a deliberate process of formation followed by implementation, Mintzberg and Waters (1985) draw a distinction between deliberate strategies, as those realised as intended, and emergent strategies, which are realised, despite, or in the absence, of intention. In their critique of the Design School of Strategy, Mintzberg et al (1998) argue that most

manifestations of strategy are implicit, fragmented and fluid, that evolve from a *'pattern in a stream of decisions'* (Mintzberg, 1978). Within a project environment these stream of decisions derives from a number of internal and external influences, which not only include the parent organisational, but all stakeholders involved in the temporary organisation. As a consequence, organisational strategy is rarely realised in the ridged, formal manner that planners assume. Despite this, there is a growing body of literature that seeks to develop implementation of strategies through projects (Pellegrinelli and Bowman, 1994, Grundy, 1998, Hauc and Kovac, 2000, Artto et al., 2001, McElroy, 1996, Van Der Merwe, 2002). This is supported by the concept of strategic alignment, which in terms of projects, becomes more complex than the traditional model of strategy formation suggests. This concept is explored and critiqued in the next section as a way to understand the rationale and limitations inherent in connecting organisational strategies and project management practice in the construction sector.

PART 2: STRATEGIC ALIGNMENT OF PROJECTS

The objective of project and strategic management integration is to essentially increase the efficiency of the processes of strategy formulation to strategy implementation. Strategic management assists managers to formulate and implement strategy in a complex and turbulent environment. Conversely, project management ensures high level of efficiency in implementation of set objectives in general (Hauc and Kovac, 2000). However, Anderson and Merna (2003) postulate that the cause of project failure often originates in poor management at the front-end during strategy formulation, rather than down stream execution. Maylor (2001) goes further to suggest that more than 80 per cent of all problems at the project level are caused by failures at the board level in firms to provide clear policies and priorities. This is regardless of Archibald's (1988) assertion that if senior managers want to manage their organisations strategically, they must provide effective project management practices linked with strategic management practices.

Irrespective of the call from numerous scholars for a deeper understanding into the nature of enquiry, current literature on aligning projects with organisational strategy is not yet comprehensive. A number of scholars focus on the upstream activities of selecting projects for the project portfolio as the critical part of the alignment process (Archer and Ghasemzadeh, 1999, Cooper et al., 2000, Aalto, 2000). Within this stream, strategic alignment relates to the need to select projects for implementation that align with the organisations strategic objectives whilst remaining sensitive to available resources (Archer and Ghasemzadeh, 1999). Other researchers have focused their attention further downstream by proposing that the provision of a managerial framework for grouping projects in the form of programmes. This provides a means to bridge the gap between project delivery and organisational strategy (Maylor et al., 2006, Partington et al., 2005, Thiry, 2002) and requires the deployment of a Programme Manager.

More recently the concept of 'project strategy' has been presented in the literature (Morris and Jamieson, 2005, Shenhar, 2004, Srivannaboon and Milosevic, 2006, Morris and Jamieson, 2004, Artto et al., 2008). Despite, the lack of clarity of the concept, if we accept the argument that all organisations have a strategy (Porter, 1979) the notion of a project having a single unified strategy that satisfies all the organisations involved is problematic. Shenhar (2004) suggests that

a project strategy is the specific unique approach the project takes to achieve the organisational strategy and is therefore the "missing link" between the business strategy and the project plans. But this would suggest in the context of multiple organisations involvement in projects that there are numerous missing links! Adapting elements of Shenhars' (2004) framework, Srivannaboon and Milosevic (2006) also propose that the project strategy present a set of general rules to guide the behavior of the project team towards achieving the organizations competitive advantage. However, it cannot be assumed that a single project can easily facilitate competitive advantage for all organizations engaged in a single project.

Despite the above, Anderson and Merna (2003) draw a distinction between a 'project management strategy' and a 'project strategy' stating that the latter usually refers to a high level plan for achieving a projects given objectives, whereas a 'project management strategy' is used to mean a strategy for the management of a project. However, a review of the literature would suggest that the distinction between 'project' and 'project management' is ambiguous and terms appear to be used interchangeably. In order to draw clarity to the concepts, we propose that development of a 'project strategy' is the direction given to the project manager by senior management. Whereas a 'project management' strategy is found in the actual project documentation that directs, plans, executes and closes a project, usually following some form of deterministic project management methodology. It is therefore the responsibility of the project manger to make strategic decisions based on management direction, external influences and his own bounded rationality (Cyert and March, 1963). Indeed, it cannot be assumed that one project has a single project manager. Indeed, in the context of the construction sector, each organization engaged in a project will employ their own project manager. Projects therefore involve multiple project managers at any single point in time, all competing to achieve their separate organizational objectives in a bounded rational way. It is this level of complexity in the context of the construction sector that presents significant challenges to any notion of project strategies, project management strategies and indeed strategic alignment

In considering such complexity, it is difficult to assert how true strategic alignment from the corporate level to the project management level will be achieved. Literature suggests that strategy be set at the at the corporate level and then filtered down to the project level (Archer and Ghasemzadeh, 1999, Morris and Jamieson, 2005). Archibald's (1988) hierarchy of objectives, strategies and projects propose that objectives and strategies are developed at the policy levels and cascade down through strategic and operational level, thereby ensuring strategic alignment. In recognising the role of strategic business units, Kerzner's (2001) hierarchy shows how corporate strategic plans flow horizontally across Strategic Business Units (SBU) and vertically to supporting plans and budgets.

.Morris and Jamieson (2004) adapted Turners model (1999) to show how organisations position their programmes and projects to achieve strategic objectives. The critical factor in these models is the assumption that projects are the *obedient servant* (Artto et al., 2008) to a single parent organisation. Therefore, drawing on these frameworks and the discussion above, the following model (Figure 1) exposes a significant number of tensions and ambiguities inherent in strategic alignment.

The model illustrates a process of how the context of the corporate strategy, in terms of defining the industry and market, is communicated to each individual SBU (Grant, 2005), who in turn develop a Project Portfolio designed to deliver the context and competitive advantage of the business strategy (Aalto, 2000). The strategic objectives of the portfolio are then presented as a collection of programmes designed to achieve the competitive directives (Lycett et al., 2004). Responsibility for communication of the project strategy therefore lies with a Programme Manager who must ensure that the programme objectives are achieved (Pellegrinelli, 1997). Thus, leaving the final implementation of the project objectives to Project Manager who will devise his own strategy, based on senior management direction and his own interpretation of project management principles. Although highly prescriptive, the model demonstrates that strategic fit is not a straightforward process of communicating strategies from corporate to operational levels. Within this hierarchy a complex number of interactions, processes, clients and varying objectives exists. Not only do strategies need to be communicated and translated into projects from the top down, but alignment of strategies need to be maintained between each level. Essentially this is a two way process, where circumstances, experiences and capabilities at the operational level impact and effect the strategic objectives at the upper levels (Slack et al., 2006). It is therefore concluded that project and project management strategies are not only formalised by a top-down hierarchy, but also from bottom-up hierarchal influences.
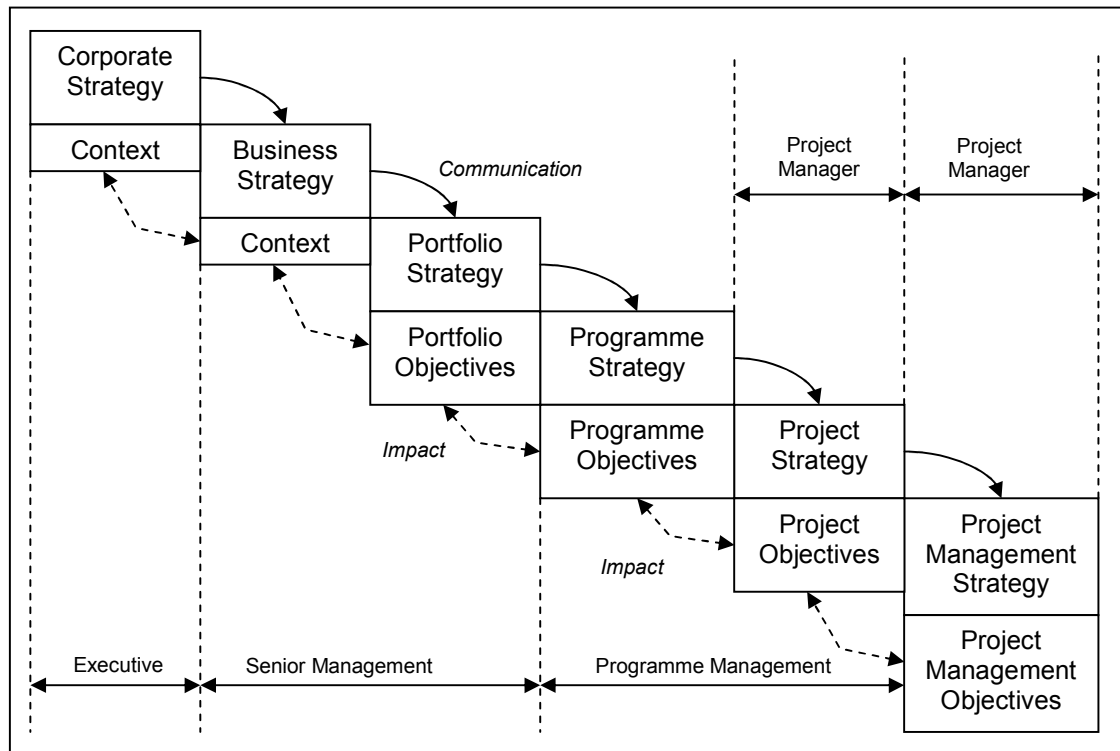
Figure 1: The Hierarchy of Strategic Objectives

DISCUSSION AND RESEARCH PROPOSITION

The notion of a single parent organisation does not readily apply to construction projects. This is because at the operational level of any given construction project there exist a significant number of stakeholders in the form of the project team, who differentiate in terms   skills, professional body and loyalty to ones own firm. Within, the construction industry this concept of sentience is particularly strong, especially at professional practitioner level, where each discipline is educated in relative isolation from each other (Walker, 2007, Miller and Rice, 1967). As a consequence, each member of the project team develops a personal conflict of allegiances, not only to the client, but also to their employer, professional body and bounded rationality. As each team member is commonly employed by different organisations there does not exist one single parent organisation as shown in Figure 1, rather there exists a number of organisations who are all attempting to align their own organisational strategy through a particular project management methodology on multiple projects.

It could therefore argued that the nature of the temporary organisation draws questions regarding strategic alignment. In considering the varied influential stakeholders at the operational level of a construction project, it would be difficult to identify how a single organisational strategy could be easily aligned with a single project. In the first instance it is doubtful that project team members, who are not part of the client organisation, would have knowledge of clients organisational strategy, and in many cases even project managers employed by the sponsor have no knowledge of the overall strategic intentions (Crawford, 2005). Instead each organisation

relies on the services of their own programme and project managers, albeit under different titles, to construct and implement an individual project strategy that aligns with the individual organisational strategy. Whereas these directives are rarely explicit, individual team members will tacitly attempt to influence decisions to favour their own organisation, thus resulting in a collision of disparate project strategies that create an emergent project management strategy, as shown in Figure 2.
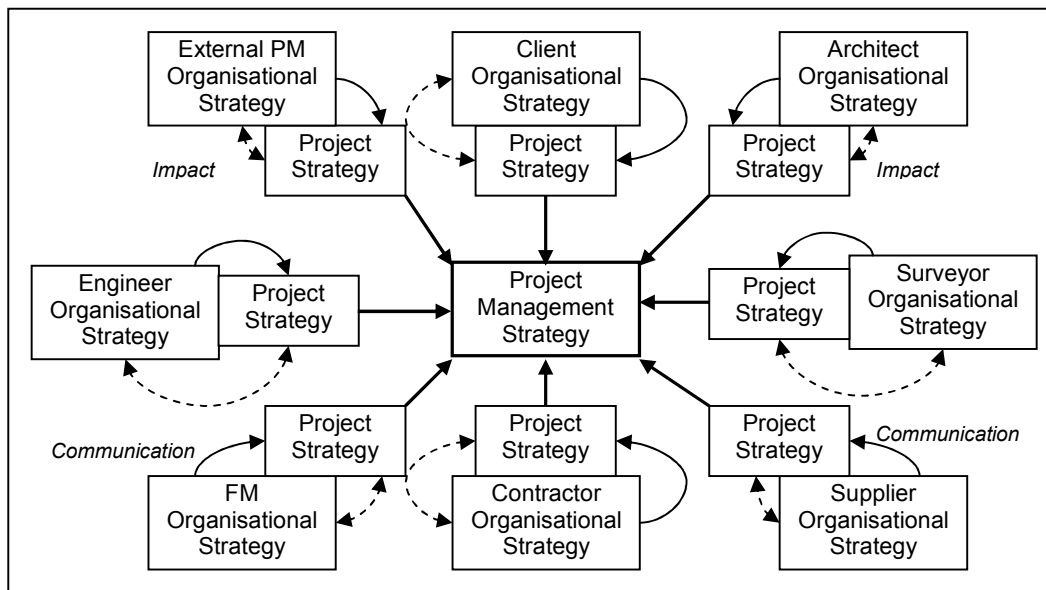

Figure 2: Projects where strategies collide

Figure 2 is therefore central to the argument regarding the collision of strategies on projects and clearly outlines the naivety of assumptions that projects can be anything other than highly contested arenas. The assumption therefore that any pre-determined project management strategy and/or a single set of project plans is therefore questionable if we concede to the argument of an emergent project management strategy developed above. It is naive to assume that any pre-determined project plans can be simplistically implemented. This is because construction projects are implemented in an emergent manner, based on changes, unknowns and the political negotiations with the project team over time. Indeed organisational strategies will also emerge and develop over the same period of time and thus place ongoing challenges to project managers. Organisational strategies are therefore not only emerging over time but are heavily influential in shaping the actions and behaviour of project managers.

Does the argument for strategies colliding on projects support the dominant view of construction projects as a context replete with adversarial and opportunistic behaviour? If so, how can attempts to diffuse initiatives concerned with collaborative working, trust, 'building down barriers', partnering and supply chain management pick their way through such complexity? Indeed is such complexity readily conceded and widely explored by policy makers and researchers embroiled in facilitating, developing and exploring the process of diffusing such initiatives? These questions that have been provoked by this critique are highly relevant for the development of research propositions that can be carried forward by the research team. The following discusses and highlights some of these.

What would perhaps be a good starting point for research into this area would be to explore the arguments put forward through an initial empirical investigation. Such research would explore the arguments that organisational strategies are aligned with project strategies, project managers concerns and interests and indeed, the project management strategy adopted on a project. Indeed, one fundamental question to be initially answered by such research would be to develop an understanding of what a project strategy looks like, how it is developed and how it is diffused in projects. And, perhaps more importantly, who owns the strategy and what interests (or whose) is the strategy developed to defend and pursue. Such research may also be instrumental in helping to make sense of adversarial and opportunistic behaviour in the construction sector.

Another line of inquiry would be to explore the consequences of aligning projects with organisational strategies on project management practice. Does such practice in reality reflect the dominant instrumentally rational rhetoric inherent in the PMBOK and standardised methodologies? In essence are these devices designed to help project managers pick their way through complexity actually useful in practice? Or indeed, are these devices sensitive to the complexity of aligning organisational strategy with projects?

Whilst the complexity described in figure 2 relates to projects in the construction sector there is substantial growth in projects being used to facilitate change and deliver organisational objectives across all sectors. We previously described this as '*projectification*' of the organisational world. If this is the case, then it is highly questionable whether project management, given its significant failings as a method to deliver efficiency in the construction sector over the last 50 years, can prove itself successful in other sectors of the economy. We are not arguing that project management will fail in other sectors but, we would like to highlight the opportunity and argue for research into this growth and cross-sector application of project management.

CONCLUSIONS

This paper has explored the issue of projects providing the context within which organisational strategies collide. Such an argument has been supported by a significant review of projects, project managers, project management and the strategic alignment of organisational strategies with projects. This review has highlighted a number of questionable assumptions in the literature and in some cases highlighted insensitivity to the complexity of alignment and project management practice. We have presented and fully discussed a model of collision that contradicts and challenges the current orthodox view of alignment. This has presented the authors with a number of lines of inquiry to potentially pursue. These have also been discussed. The research is still ongoing and currently negotiating its way through the arguments, models and research propositions presented. Undoubtedly however the paper has proved instrumental in shaping a debate regarding project strategy.

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