

Association of Researchers in Construction Management

ARCOM Doctoral Workshop

**Public Private Partnerships/Private
Finance Initiatives (PPP/PFI)**

The School of Built & Natural Environment
Glasgow Caledonian University, Scotland, UK

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Workshop Convener: Dr Paul Stephenson

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Workshop Programme

| Time | Description | Speaker |
|---------------|---|---|
| 11.00 - 11.10 | Arrivals and Welcome | Professor Akintola Akintoye/Paul Stephenson |
| 11.10 – 11.30 | Public Private Partnerships for Sustainable Development of Infrastructure in developing countries | Prof A Akintoye Glasgow Caledonian University |
| 11.30 - 12.00 | Managing Innovation in the Construction Industry | Paraskevi Gkiourka, University of Portsmouth |
| 12.00 - 12.30 | Innovation in Public Sector Construction Procurement: The Implementation of Community Benefits in PPPs | Michael Dickinson, University of Salford |
| 12.30 - 13.30 | <i>Lunch and Networking</i> | |
| 13.30 - 14.00 | Speeding up Shanghai Pudong Development | Yawei Chen, Delft University, Netherlands |
| 14.00 - 14.30 | Rethinking Leadership to Address Cultural and Behavioural Challenge in Construction Partnering Projects | Niraj Thurairajah, University of Salford |
| 14.30 - 15.00 | Open Discussion | All Participants |
| 15.00 | Summary and Close | |

Introduction

The focus for this research workshop is on Public Private Partnerships/Private Finance Initiatives (PPP/PFI). These initiatives introduced by the UK Government represent an important part of its strategy aimed at achieving the delivery of high quality public service projects. The concept of the Government's commitment to efficiency, equity and accountability for appropriate PFI projects is seen as a means of delivering several important benefits in addition to achieving clear value for money.

PFI, in particular, is as a means to deliver high quality services and to ensure that public assets are delivered on time and to budget. In doing so, the requirement is for the private sector to provide its own capital at risk in order to deliver clear levels of service to the public over the long term. Clearly, the Government has contributed much effort into these initiatives and has provided much documentation through key publications, guidance notes and statistics, in addition to the establishment of an operational taskforce to assist public sector partners with operational PFI issues.

To date, the extent of PFI projects is widespread and covers various sectors including healthcare and the construction of infirmaries and hospitals, in addition to education and work on schools and universities. PFI projects have also been completed for defence to meet the requirements of the MoD, and custodial projects involving the construction of detention centres and prisons. Other projects based on PFI have also been completed including fire stations, health and safety laboratories and residential day care centres.

It is this backcloth of projects and developments which has spawned research into the assessment of investments, partnerships, innovations and the suitability of specific projects under PPP/PFI.

MANAGING INNOVATION IN THE CONSTRUCTION INDUSTRY

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There is a relationship between a firm's profitability or future success and its ability to innovate within the construction industry. This research is an empirical investigation of key internal, external sources and strategic resources of innovation capability in construction firms in the UK, seeking to shed light to possible mechanisms of propagation of innovations. An experimental measure of innovation capability is designed, which captures not merely the occurrence of innovations but also their scientific complexity and originality.

Keywords: external environment, internal environment, managing innovation, strategic resources, and propagation.

INTRODUCTION

Construction organizations need to improve their competitive advantage and respond to changing technology and thus they can only survive and proliferate through innovation, (Brennan & Dooley, 2004). Design and construction markets currently face many drivers for increased project performance, including new materials of construction, new facility designs involving greater complexity and requiring increased quality, shorter schedules, and decreased investment. The internal dynamics of construction organizations, the external environment in which they operate and the strategic resources that they have, must be such, that they can respond to change by adapting their orientation to reflect, and be able to respond in a demanding and most competitive environment (Steele & Murray, 2000).

A range of factors internal to firms are found to be relevant, including organisation's culture (Aragón-Correa, García-Morales, & Cordon-Pozo, 2005; Landry, Amara, & Lamari, 2002; Lemon & Sahota, 2004) structure (Kash, Auger, & Li, 2004; Kash & Rycroft, 2002; Shefer & Frenkel, 2005) strategy (Gilbert & Birnbaum-More, 1996; Porter, 1985), policy (Pavitt, 1976) and systems (Senge, 1991). Significant external factors are identified to be the political, legal and the economic of the environment (European Commission, 2005, 2006) Strategic resources identified are marketing (Kotler, 2003), operations (Manu, 1996), Research & Development (R&D) (Shefer & Frenkel, 2005) financial (Mintzberg, 1979) and human resources management (Lau & Ngo, 2004).

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AIM OF THE RESEARCH

A large number of potentially important internal factors, external factors and strategic resources might contribute to a greater or lesser degree to the innovation capability of construction firms. However, the information from the persistent literature mainly comes from the manufacturing, pharmaceuticals and high tech industries indicating that more detailed insights in construction sector are clearly needed for design and implementation of innovativeness. In particular: which specific internal and external factors can be considered key sources of construction organisation's innovation capability; are those sources related, able to enhance propagation mechanisms of innovations in the construction industry, and if so, which of those are most important in this respect?

The aim of this research is to explore and develop propagation mechanisms of innovations in the construction industry.

INNOVATION MODEL

A review of the pertinent domestic and foreign literature, ongoing research, and relevant practice showed a relation to various factors that affect innovation.

Analyzing the key concepts and contents of the literature surveyed, three conducts of innovation were identified: (a) internal environment, (b) external environment, (c) strategic resources. From the three conducts, the associated key concepts and their interactions as elaborated in the literature, the author has developed a model of innovation which is captured in figure 1.

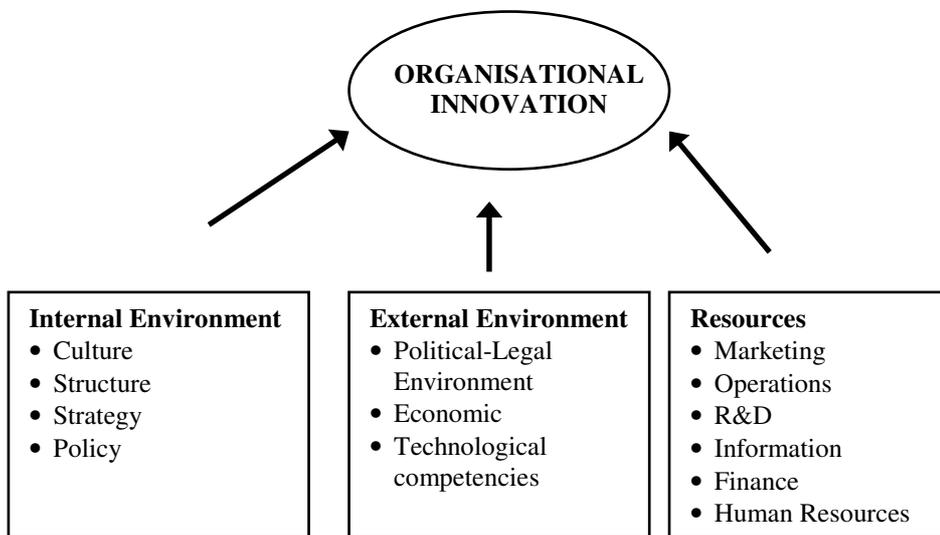


Fig 1. Innovation Model

Internal Environment

Organisations culture can be modified to encourage innovative behaviour by measuring attributes that constitute culture such as: technology used (Lemon & Sahota, 2004), leadership style, ownership type (Aragón-Correa et al., 2005) and collaborations (Landry et al., 2002).

The structural composition of the organisation could not foster innovation unless it supports free flow of information, clear hierarchies and organisational titles, decision-making authority based on expertise rather than positional authority and intense communication between different functional groups within the project context (Johnson & Clayton, 1998).

Strategies are means to ends, and these ends concern the purpose and objectives of the organisation. They are the things that businesses do, the paths they follow, and the decisions they take, in order to reach certain points and levels of success (Thompson, 2003). Concerning the strategy of innovation Porter (1985) argues that firms gain competitive advantage by developing a set of activities that distinguishes them from its competitors. Mintzberg (1979) also argues that strategy is based on firms' existing rules, assumptions and norms.

Policies should be related to stated objectives and strategies and assist in their implementation; at the same time they should not restrict managers to the extent that they are unable to make incremental and adaptive changes when these are appropriate or necessary. Policies need not be written down or even formulated consciously. They may emerge as certain behaviour patterns become established in the organisation and are regarded as a facet of values and culture (Thompson, 2003).

The organization, like the human body is an open system interacting with their environment as they convert inputs into output. Inputs include people, finance, materials and information, provided by the environment in which the organization exists and operates. Output comprises such items as goods and services, information, ideas and waste, discharged into the environment for consumption by "end" or "intermediate" users and in some cases representing inputs used by other organizations (Worthington & Britton, 2000). The learning organization is an organizational form that enables individual learning to create valued outcomes, such as innovation, efficiency, environmental alignment and competitive advantage (Thompson, 2003).

External Environment

Innovation according to Tang (1998) thrives on challenge. Therefore an innovative organisation would respond to a challenging external environment in which it operates according to its vision, mission and strategy. The political and legal regulations, the economic rules and the technological competences form a larger system in which the organisation constitutes an integral part.

The political and legal regulations provide the framework to encourage innovation by promoting incentives such as favourable taxation laws, competition and employment laws (European Commission, 2005).

Success on innovation also depends greatly on economic rules. A framework to evaluate a nation's competitiveness through analysing its economic factors such as the level of economic activity, trends in GDP and rate of inflation is vital to favour innovations (European Commission, 2005, 2006).

A good communication with the technological community and knowledge of the latest technological achievements enables firms to track technological trends. In addition the technological environment in respect of the governments' R&D spending, energy and transportation provision create a prosperous ground towards innovation (Tang, 1998).

Strategic Resources

Managers must be aware of and must address strategic issues if the resources are to be used for creating and sustaining competitive advantage (Porter, 1985).

Marketing can be looked at from the point of view of managing the activities which comprise the marketing function. Product design and pricing, advertising, selling and distribution would be included here (Kotler, 2003).

Innovations and quality can be seen as aspects of production or operations management. Again, it is helpful if these factors become part of the culture. An innovatory organisation is ready for change, and looking to make positive changes, in order to get ahead and stay ahead of competition. A concern of quality in all activities will affect both costs and consumer satisfaction (Trott, 2002).

A good financial metric that provides a good indication of an international network operator's financial strength is debt/equity ratios and specifically long-term debt/equity ratios that measure the firms borrowing capacity. Brownlee Thomas (2002) state that the lower the (positive) debt/equity number, the wider the margin of protection to business operations. For these reasons, creditors and risk-averse multinational enterprise customers like low ratios (lower than 2.0 for creditors and 1.0 for customers).

In human resources management values are communicated and spread throughout the organisation. Training staff is important and staff performance needs to be measured (European Commission, 2005).

Financial management includes control of costs so that profit is achieved and value is added to products and services primarily in areas that matter to consumers. This should provide differentiation and competitive advantage (Mintzberg, 1979).

Lower costs and differentiation are important themes in competitive strategy. They relate to both an awareness of consumer needs and the management of resources to satisfy these needs effectively and profitably (Thompson, 2003).

RESEARCH METHODOLOGY

This research tries to describe a propagation mechanism by exploring the extent by which relative factors identified in the literature contribute to propagation of innovation and then evaluate the status quo of each specific organization in order to develop a framework for achieving better practice towards innovation.

The research methods that will be used include structured interviews and postal questionnaires within a range of construction companies. A random selection of the firms will be made by an extended list of construction organizations. An attempt will be made to achieve a reasonably good spread across the construction firm spectrum, including several low, medium as well as large organizations. The respondents that will be addressed will be middle or senior managers that have responsibilities in research and development. During the data collection stage, all responses will be treated as single homogeneous group.

A statistical analysis using SPSS will follow to derive the results. An analysis of the findings will be conducted to develop a framework of propagating innovation and use it as a tool for achieving best performance of firms towards innovation.

Future research might address issues such as whether the tool applies in different industries other than the construction industry and the implications that this might bring to fostering innovation.

PROBLEMS ENCOUNTERED IN PILOT SURVEY

A random sample of one hundred construction firms operating across the country was selected to be addressed for the pilot survey. However, only four fully engaged and returned a completed questionnaire. Those who responded were senior managers. This was expected to provide both a consistent overview of the organisation's innovation mechanisms and also get a clearer indication of the senior management's perception on innovation initiatives within the respective organisations. The main problem encountered was trying to engage people to afford the time to respond to the survey as they reported they have very busy schedules.

OUTCOMES, IMPORTANCE AND CONTRIBUTION OF PROPOSED RESEARCH

The research seeks to construct a framework that could also be used as a helpful tool for construction companies to use for propagating innovation. A two-stage process will obtain the results. Stage one tries to perceive the extent to which the respondent considers that each significant variable contributes to propagation of innovation and in stage two the actual position of the organisation towards innovation will be captured. Then, according to the statistical analysis, the framework will provide a context within which the organisation may be advised to make changes regarding its' culture, structure, strategies or policies; redefine its strategic resources such as marketing, operations, R&D, information systems, finance, and human resources; and finally, re-evaluate the external environment in which it operates or plan to extent it's operations by assessing opportunities and threats.

CONCLUSION

Given that the overall performance of construction industry is interdependent of a variety of factors and innovation adoption rates depend by the internal, external environment and strategic resources, this research aims to contribute in the area of construction industry offering new theoretical and practical insights. It is envisaged that a model(s) of propagating innovation by identification of variables and/or parameters that are coherent with these model(s) will be developed. This will be followed by the development of a framework, based on the model(s), to boost innovation adoption and facilitate improvement in performance.

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INNOVATION IN PUBLIC SECTOR CONSTRUCTION PROCUREMENT: THE IMPLEMENTATION OF COMMUNITY BENEFITS IN PPPs

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This paper reports on PhD research that is being undertaken in the area of public sector construction procurement. The research presented in this paper relates to an ongoing case study where the two public sector clients being researched have attempted to move new long-term construction partnerships towards greater policy roles, by incorporating community benefit issues in procurement. The research is based on first-hand observation of the procurement process and the implementation of community benefits. Some interim findings on how the local authority clients attempted to motivate developers to deliver on the community benefit issues, and how the developers responded to the procurement innovation, are presented. Insights derived from this research will be relevant to practitioners implementing policy innovations in the context of public procurement and researchers interested in innovation in public private partnerships.

Keywords: public sector construction procurement; PPPs; community benefits; innovation implementation.

INTRODUCTION

Public sector construction procurement in the UK has been subject to several major changes over the last two decades. One change has seen successive governments develop a more strategic approach to public procurement by emphasising the need for partnership relations with key suppliers (Erridge and Greer, 2002). More recently, public procurement in the UK, as across the globe, has also been seen to move towards a greater policy role (IRSPP2, 2005). However, despite these strategic shifts in public procurement, and despite considerable effort from government entities and procurement practitioners to improve procurement practices, public procurement has been a neglected area of academic research (Thai, 2001).

This paper reports on PhD research that is being undertaken in the area of public sector construction procurement. The PhD research focuses on the implementation of policy innovations within the context of public sector construction procurement. The interim findings presented in this paper relate to an ongoing case study where the two public sector clients being researched have attempted to move new long-term construction partnerships towards greater policy roles, by incorporating community benefit issues in procurement. The public sector clients involved in this research are two neighbouring local authorities in the North West of England that are in the process of establishing long-term construction partnerships with two large housing developers. The construction partnerships are scheduled to last for a minimum of 10 years and will deliver a significant amount of new housing within the two boroughs.

As well as delivering new housing the local authority clients are attempting to ensure that the construction partnerships also address wider government policy objectives and deliver benefits to the local community. These community benefit issues include: (i) targeting employment and training opportunities at women, the Black and Minority Ethnic (BME) community, disabled people and the unemployed; (ii) using and training existing local construction labour; and (iii) where feasible including local subcontractors and suppliers in the construction supply chain. By addressing these issues the local authorities intend to assist under-represented groups into employment and retain a significant proportion of the construction expenditure in the sub-region. In addition, it is expected that the community benefit intervention will address labour shortages and skills gaps in the sub region, whilst over time creating a sustainable local supply chain that can compete for future work both regionally and nationally.

The inclusion of these community benefit issues in the future construction partnerships is an innovation for the two local authorities being researched. In order to realise the expected benefits of the innovation the local authorities must successfully implement the community benefit policies. However, implementation of innovations is not straightforward and many organizations often fail to realise the expected benefits of the innovations they adopt. Indeed, organisational researchers have increasingly identified implementation failure, not innovation failure as the cause of many organisations inability to achieve the intended benefits of the innovations they adopt (Klein and Sorra, 1996). The importance of effective innovation implementation has also been recognized in the construction innovation research literature (Winch, 1998; Slaughter, 2000; Thomson and Munns, 2004).

Guided by seminal work in the field of innovation process research (Van de Ven and Rogers, 1988; Van de Ven et al., 1999), the case study research presented here is based on first-hand observation of the community benefit innovation implementation as it occurred over time. The research investigated how the innovation was integrated into the procurement process, how the local authority clients attempted to motivate housing developers to deliver on the community benefit issues and how the developers responded to the procurement innovation. Real-time observation of the implementation process as it unfolded, in its natural context, has provided rich data on the innovation process and the individuals and factors that have influenced its development. Insights derived from this data will be relevant to practitioners implementing policy innovations in the context of public procurement and researchers interested in innovation in the context of public private partnerships.

The paper is organised as follows. In the next section the policy context for the inclusion of social and community benefit issues in public sector procurement is presented. This is followed by an overview of research methods undertaken in this research. The next section of the paper then presents some interim findings, which for the purpose of this paper, focus on how the local authority clients attempted to motivate housing developers to address community benefit issues and how the developers responded to the innovation. Finally, key points of the research are summarised.

POLICY CONTEXT

Contrary to common perceptions, the inclusion of social issues and community benefits in public procurement is not prohibited by either British Government policy or EU rules (MacFarlane and Cook, 2002; OGC, 2006). Social and community issues included in public procurement must though operate within the restrictions imposed by domestic and international law including UK procurement policy of best value, the EU Treaty and EU Procurement Directive (OGC, 2006). In practice this means that community benefit issues can be included in procurement procedures provided they are related to the subject of the contract, they are mentioned in contract notices, they are supported by the powers of the contracting authority, and they provide a ‘measurable benefit’ to the contracting authority (Macfarlane and Cook, 2002; OGC, 2006).

To encourage and support public sector bodies to use their procurement spend to address community benefit issues a significant amount of guidance has been published by the government. One author has concluded that such a number of policy statements on the potential of public procurement to achieve community benefits have been published because most procurers do not use such approaches at present (Binks, 2006).

The following extracts from The Byatt Report (Byatt, 2001) demonstrate support for procurement to address local community issues.

“Good procurement will play a positive role in meeting the needs of specific groups within the community, including those who need most support” (Byatt, 2001: pp.35).

“In deciding on the provision of goods, services and works, local authorities may wish to take account of wider objectives such as protection of the environment or encouragement of local businesses, support for the local economy and local employment” (Byatt, 2001: pp.35).

Local government is a particularly appropriate level of government for achieving community benefits through procurement because of the mandate provided by The Local Government Act (2000). Under the Local Government Act (2000), local authorities have powers to promote or improve the economic, social and environmental well-being of their communities, and providing that there is legal compliance, councils can work with suppliers to realise “community benefits” of this kind through their procurement activities (ODPM, 2003). The National Procurement Strategy for Local Government (ODPM, 2003) has particularly emphasised that local authorities can make creative use of their purchasing power to influence the well-being of their communities:

“Councils should invite bidders for partnerships to include in their offers optional, priced proposals relating to the delivery of specified community benefits (economic, social and environmental) that are relevant to the contract. This might include employment, training and enterprise opportunities in the locality and local multiplier effects.” (ODPM, 2003: pp. 50).

More recently, The Office of Government Commerce (OGC, 2006) has developed guidance on how to include ‘social issues’ in public purchasing. The guidance demonstrates how social issues can legitimately be incorporated into the different stages of the procurement process.

To summarise this section, public procurement must adhere UK and EU procurement law by achieving value for money and meeting the principles of competition, non-discrimination and transparency. However, within this overall policy arena, public sector bodies still have significant scope to use procurement as an instrument to achieve community benefits.

RESEARCH METHODS

The empirical research presented here relates to a case study of a major public sector residential construction programme involving two neighbouring local authorities and a public sector pathfinder agency from the sub-region. The research has tracked the implementation of a policy innovation, namely community benefit issues, in long-term construction partnerships that are being established between two local authorities and two major private sector housing developers.

In order to explore the issues of how the community benefit innovation was integrated into the procurement process, how the local authority clients attempted to motivate housing developers to deliver on the community benefit issues, and how the developers responded to the innovation; different qualitative research methods have been employed. The study has so far used participant observation as the principal research method, supplemented by document analysis and informal interviews. Document analysis was used to examine key procurement material including the Pre-Qualification Questionnaire (PQQ), Invitation to Negotiate (ITN) publication and the formal responses from potential private sector developer partners.

Participant observation could be used in this study because the public sector pathfinder agency employed the first author of this paper during the procurement programme in the capacity of research assistant. The job role was a low status position and did not give the researcher any mandate to participate in decision-making regarding procurement, but it did grant first-hand access to observe the procurement process as it unfolded. As a research assistant the author was assigned a project by the procurement director and worked closely with the procurement team to deliver the work. The work enabled the researcher to participate in a range of activities including internal team meetings, formal meetings with local councillors and negotiation meetings with private sector constructors. Observations about the implementation of the community benefit innovation were recorded during working hours and more detailed fieldwork notes were produced at the end of each day.

Although participant observation is considered a time-consuming method and is sometimes criticised for being unable to produce quantifiable data, it has been justified elsewhere in public sector construction research as being very advantageous (Ball et al., 2000). Participant observation was deemed appropriate for use in this research because:

- The procurement process is an observable social process;
- Participant observation allows first-hand contact of attempts to implement the innovation and motivate developers towards delivering on innovation;
- Participant status provides the observer with rich understanding of the case study context and awareness of the main project developments and idiosyncrasies;

- Participant status gives the observer access to the key individuals who influence the development of innovations, but would normally either be unable (time wise) or unwilling to communicate directly with researchers;
- Participant observation allows the investigation of innovation as the procurement process unfolds and this can reveal how influences on innovation change over time;
- The longitudinal nature of participant observation means that new influences on innovation might be identified that other ‘snap-shot’ research techniques have overlooked.

INTERIM FINDINGS

The following section presents some preliminary findings that focus on how the local authority clients attempted to motivate housing developers to address the community benefit innovation and how the developers responded to the innovation.

Motivating Developers Towards the Innovation

Throughout the entire procurement process the local authorities wanted potential developer partners to recognise the importance of community benefit issues to the success of the proposed partnership and housing market intervention. The local authorities articulated the need for the community benefit innovation to developers in several ways. At the beginning of the procurement process the clients used developer open days to verbally introduce the importance of the community benefit issues. As procurement progressed the formal procurement stages like Pre-Qualification Questionnaire (PQQ) and Invitation To Negotiate (ITN) were used to reiterate the importance of the innovation. These procurement stages were also used to try and stimulate developers to generate ideas on how they could contribute to the wider economic and social objectives of the construction partnership.

For example, one of the ITN documents included the following statement:

“ClientX is working to maximise job opportunities and develop the skills of residents in the area ... we are asking lead developers to play their role in providing job and training opportunities and so to support the local supply chain ... we look forward to reviewing your proposals” (ITN).

Potential developers were asked to describe in their ITN responses their approach to local employment and community benefit by answering questions like the following:

“Explain how you will support this initiative [local labour] through creating mainstream and innovative local training opportunities, at both trade and professional levels, within your organisation and your supply chain” (ITN).

The extracts above are a demonstration of some of the attempts to focus the attention of developers on the community benefit issue. The community benefit issue was also included in the selection criteria used to score the ITN responses from different developers. An additional strategy that the local authorities are currently working on to ensure the effective implementation of community benefit issues, is the use of a bespoke performance measurement system that has been developed by the public pathfinder agency supporting the local authorities.

The framework would become a management tool for the local authorities to measure the performance of the housing developers against key performance indicators (KPIs). Two of the KPIs, out of twelve in total, measure local labour and local firm participation in the supply chain and the offering of training opportunities. In order to ensure that achieving the KPI targets is important for the developers the pathfinder agency has incentivised the KPIs by linking them to developer profit margin and overage. Good developer performance on a KPI would mean the developer would get rewarded and earn a higher return, bad performance would mean the developer would be penalised and lose some of their incentivised return. The incentivised framework of KPIs was regarded by pathfinder's procurement staff as the most influential method available to them to motivate developers towards innovation. Linking KPIs to developer return was the idea of the programme's development director who prior to this position had been a senior manager with several private sector developers. The development director argued that knowing the industry as he did the local authorities had to use something "*with real teeth to get action on the local issues*". Another procurement manager suggested that incentivised performance is "*the only way we can get the developers do what we want ... to innovate*".

To support the developers in achieving the community benefit issues a construction employment, skills and training agency has also been created, with funding from the public sector pathfinder agency. The construction agency was created with a view to helping all the public construction work in the sub-region address wider social and economic issues, however, working with other public sector bodies has to date proved difficult. Successful delivery of the community benefit issues by the new housing developers in partnerships with the two local authorities is therefore crucial to the performance of the construction agency. The construction agency is working with employment agencies, colleges, local firms and the developers to ensure achievement of community benefit objectives, and has commissioned work from several consultancies to improve the likelihood of success.

The Responses of Developers to the Innovation

There were mixed responses from potential developers to the community benefit innovation. Whereas some of potential private sector developers had experience of delivering on such issues in previous projects, and were able to present potential strategies to achieve the desired wider policy goals, other developers were doubtful of how this could be achieved, although they did acknowledge the potential value of community benefits. As one of the development managers for the pathfinder agency suggested it appeared that the potential developers could be divided into those developers that were happy to deliver on these issues and those developers that struggled to grasp the importance of these issues for the clients. The same manager predicted that certain developers that had the capability to deliver on community benefit issues would create market niches for themselves in the future.

As a general rule, and as would be expected, the potential developers with experience of delivering community benefit issues were more positive and receptive to the expectations of local authorities. These developers were able present success stories from similar regeneration programmes, for instance a self-financing training model for local apprentices in a nearby city. This gave the clients confidence that certain developers could deliver on this issue. Examples of the rhetoric from potential developers with previous experience of delivering community benefits, included:

“New housing development is only part of the wider regeneration of the area and for it to succeed monies have to be circulated within the area. It is an essential part of creating sustainable communities” (A potential developer with previous experience of delivering community benefits).

“We are committed to ensuring that the proposed Pathfinder Partnership delivers more than new housing but also creates jobs and training opportunities, and supports neighbourhood economies and local businesses”. (Another potential developer with previous experience of delivering community benefits)

However, in contrast to such views, other developers with less experience of delivering community benefits identified barriers and obstacles that would prevent them from achieving on the issue. Some of these developers argued that good performance on community benefit issues, although desirable, would be outside their control. For instance one developer stated: *“Although, the investment in new housing in the area is a major boost to construction activity, it is unlikely that the local supply chain will be able to provide adequate assistance without significant support”*.

Most of the developers recognised the potential value that community benefits could bring against backdrop of labour shortages. One developer acknowledged at the ITN stage: *“Given the pressures of the construction labour market, in order to deliver the project goals we have to be able to access new labour. It is in our interest to be part of initiatives that enhance skills, training and experience”*. Another developer argued that equality and diversity issues could help tackle the labour shortage arguing: *“The construction industry has a reputation for being overwhelmingly white and male and therefore it is not surprising that we are experiencing a major skills shortage. We must improve the attractiveness of our industry to young people from underrepresented parts of the community”*.

Different developers proposed different strategies to achieving the community benefit issues. The majority of developers expressed intention to work with local colleges and agencies to source labour and in some cases proactively develop the capacity of local SME/BME firms. One developer presented detail plans at the ITN stage for raising awareness of the employment opportunities available in the construction programme, these plans included provision of a temporary facilities on site that included a job shop. One of the developers that had a track record of delivering community benefits declared that they would include social benefit clauses as a contractual requirement for their suppliers to ensure delivery of the wider social and economic benefits. This developer also expressed the intention of undertaking an audit at the beginning of the programme to identify all potential sub-contractor and supplier resource in the local area. Another developer argued that their presence in the area alone would inevitably facilitate the up-skilling of local subcontractors because of the best practices for quality, employment conditions, welfare and safety that all subcontractors and suppliers would have to adopt.

In response to the incentivised KPIs, one developer was able to say: *“We would recommend using KPIs to measure the involvement of local labour in the programme”* and went on to commit to achieving participation targets of over 30% for both local labour and local suppliers. However, another developer rejected incentivising the local labour KPIs because they believed the quality of homes produced might be compromised if they were trying hard to achieve a good performance score on local labour or trainees. Another of

the potential developers completely rejected the use of any performance measurement that was linked to their return.

At present negotiations are underway between preferred private developer partners and the two local authorities. One issue that has caused the local authorities some concern is the extent of the developer's national supply chain arrangements that already exist. The pathfinder agency has identified that these arrangements will lead to significant leakage of materials and supply expenditure out of the sub-region. One partial solution to this problem that has been proposed by the developers is for where possible material supplies to be sourced through local merchants. A second issue is that the main contractors undertaking the project and site management of the construction work for the housing developer is the key player responsible for supplying work to sub-contractors and labour, and therefore crucial to the successful implementation of community benefits. However, these main contractors lack the managerial capacity to work towards the community benefit issue and moreover, are not directly accountable to the client before the construction programme begins, when considerable value can be added.

SUMMARY

This paper has presented an ongoing case study where the two public sector clients being researched have attempted to move new long-term construction partnerships towards greater policy roles, by incorporating community benefit issues in procurement. The realisation of the expected benefits of the community benefit innovation requires effective implementation. However, implementation in the context of public private partnerships, where the public sector clients require private sector partners to deliver on the community benefit issues, is not straightforward.

Using the participation observation research method, this research followed the procurement process to track the implementation of community benefit innovation as it unfolded over time. In this paper some interim findings of how the local authority clients attempted to motivate housing developers to deliver on community benefit issues were presented alongside some preliminary findings on how the developers responded to the procurement innovation.

The findings revealed that the local authorities attempted to manage the attention of developers towards the community benefit innovation throughout the procurement process. In addition, findings revealed that successful delivery of community benefit issues would be important to developers for the duration of the partnerships because of the incentivised performance measurement system that was developed by the pathfinder agency supporting the local authorities. Finally, the research also identified that a specialist construction agency was created in the sub-region to assist developers in the implementation and delivery of the community benefit issues.

Potential housing developer partners reacted in different ways to the community benefit innovation proposed by the local authorities. The majority of the potential developers could recognise the potential value of the community benefit issues. However, some of the potential developers with little experience of delivering wider policy objectives were doubtful over how easily they could be achieved. These developers were especially reluctant to be incentivised to deliver on these non-construction community issues. On the

other hand some developers with prior experience of these issues were able to show strong commitment to this element of the tender and demonstrate past successes from similar projects that scored well in tender evaluation.

At present legal negotiations between the local authorities and their preferred housing developer partners are ongoing and more issues relevant to the implementation of the community benefit innovation in the partnerships have been identified. The progression of the partnerships will be observed in the future and the implementation of community benefits will be followed further to provide insight into the implementation process and the factors that have influenced the development of the innovation.

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Speeding up Shanghai Pudong development

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Abstract

Public-Private Partnership (PPP) is considered to be an integrative method in utilising financial, institutional, human and physical resources to manage the complexity of economic and social changes in urban transformation. Establishing a partnership can allow both public and private sectors to share investment, risk, responsibility and rewards. PPP is applied to urban redevelopment in many countries, especially in urban mega-projects. This paper attempts to understand how PPP is adapted to and developed in the Chinese context by exploring the practice of PPP development in an urban mega-project - the Shanghai Pudong development. It examines the roles of the public and the private sectors and how they interact with each other in the development process of Pudong. The research reveals that the development of PPP in Pudong involves complex global-local linkages. Innovative measures have been introduced in this urban mega-project to create an active funding mechanism involving more non-public finance. Finally, the performance of the PPP mechanism is evaluated and the implications for future policies are discussed.

Key words: Developmental state; urban area redevelopment; network management; public-private partnership; global-local links

I. Introduction

Public-private partnership, which has grown increasingly prominent on the international urban policy agenda in recent decades, was introduced as an innovative method for responding to the complexity of economic and social changes. The underlying logic for establishing PPP is that both the public and private sectors have unique characteristics that provide them with advantages in specific aspects of services or project delivery.

Establishing a partnership can allow both sectors to share investment, risk, responsibility and reward between the partners. PPP can mobilize more capital than can the public sector alone. The public sector can utilise private sector expertise or bring the private sector to help realize efficient management of projects, while remaining responsible for public interest issues and ensuring delivery at a specified service level. Besides the combination of specialized qualitative and quantitative roles in maximizing economic efficiency, partnership meets contemporary ideological requirements in terms of both economic liberalization and administrative decentralization.

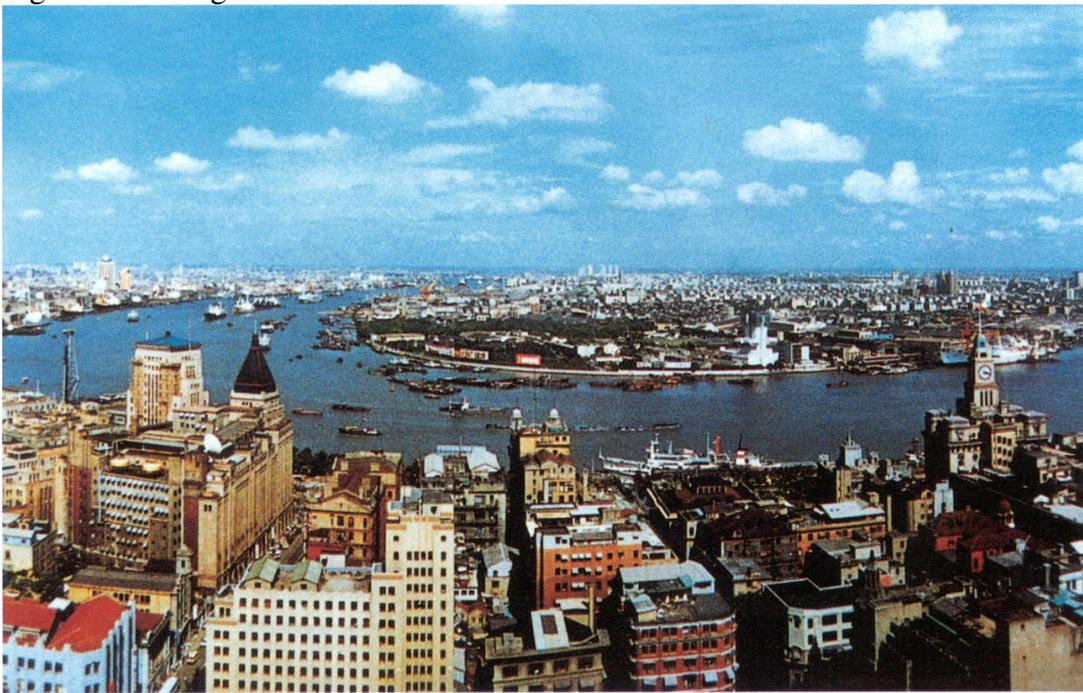
Though the popularity of the application of the PPP mechanism continues to grow, researchers are still divided on the definition of the term "public-private partnership" and its effectiveness. The article "Rhetoric and Reality of Public-private partnerships" (Wettenhall, 2003: 77-107) documents thoroughly the debate on public-private partnership in both the academic world and in practice. Besides disagreement on the term of PPP itself, opinion is also split over issues of applicability. For example, there is a school of thought that local political and social cultures in the Confucianist Asian² countries are far less amenable to [the] plural [partnership] mode of service delivery than Western cultures (Common, 2000: 135-148; Wettenhall, 2003: 87). Confucianism's hierarchical structure and its influence on the political and societal structure of the nations are blamed for the difficulties encountered in putting PPP arrangements into practice. However, the discussion in this article is based more on the theoretical analysis of cultural differences than an exploration of practical issues. Some statistics on the development of PPP in urban development in Eastern Asian countries shows that the practice has been rather fruitful. For example, over the period 1985-2000, there were 2,098 projects worldwide worth US\$907 billion which were user-fee financial infrastructure projects planned and funded with PPP money, among which 732 projects totalling US\$ 433 billion were located in Asia (not including the Middle East). China and Hong Kong accounted for 168 projects at US \$ 108 billion--the leading country in the world in this category. On the other hand, there is little research to provide an in-depth understanding of PPP practice in Asia. This phenomenon has raised the following questions: what is the reality of PPP application in the traditional Confucianist society (Eastern Asian countries plus Singapore)? Can PPP be applied in such societies? If PPP is applied in such societies, is there any difference from the PPP in western cultures? Is this mechanism more influenced by the globalization process or the traditional Confucianist characteristics of the local culture? This curiosity has led the author to examine a concrete example of urban redevelopment to understand how the market as well as public-private partnership can be embraced despite hostile position towards the market, in this case the Chinese context.

In its drive to achieve economic reform and implement its open-door policy, Chinese cities have become instruments of economic growth (Lambooy and Manshanden, 1992). To generate economic growth, the private sector, as well as private investment, is considered essential in promoting Shanghai's urban development. The Chinese central

² Confucianist Asia includes the People's Republic of China (PRC), the Hong Kong Special Administrative Region (SAR), Taiwan, South Korea and Japan in East Asia and Singapore in South East Asia that shares many social-economic features with the rest of East Asia. (Common 2000:134)

state and local states were compelled to channel increasing amounts of public money into creating a built environment that would succeed in attracting foreign investment. As China's business centre and one of the most important contributors to the economic base in China's modern history, Shanghai's every step not only reflects the national strategy and culture but also has consequences for the surrounding regions and even neighbouring countries. The development of Shanghai Pudong³ has established seemingly contradictory but synergistic relationships between the state and the private sector which are driving the city's globalisation. It therefore becomes an interesting reference for us to understand the changing relationship between the state and the market and the applicability of public-private partnership in China's urban transitional period.

Figure 1: Pudong in 1990



The paper is based on the authors' ongoing in-depth study of the Shanghai Pudong development.⁴ The author takes a closer look at the changing relationships between the public sector and the private sector in the urban redevelopment process and possibility of applying public-private partnership (PPP) in the Chinese context in an urban mega-project - the Shanghai Pudong development. The exploration is not so much focused on defining the typologies of PPP applied in a Chinese context, but rather why and how such a mechanism can be embraced in relation to the changing relationships between the public

³ Pudong generally refers to a particular area in Shanghai. The original Pudong occupied an area of 350 km² east of Huangpu River and north of the Chuanqiang River. In 1992 the Pudong New Area was established, increasing the size of the administrative area to 533 km². If the vast hinterland of Pudong New Area is included, the size of the total area on the east bank of the Huangpu River amounts to 2,000 km², 30% of the total territory of Shanghai.

⁴ Over the last four years interviews have been carried out with some forty people involved in the development of Pudong. The interviews, which were conducted by Yawei Chen, were held with people from the full range of organisations involved in the development directly or indirectly. These included, from the public sector, the Shanghai Municipal Construction & Management Commission, the Shanghai Urban Planning and Design Institute and various branches of the Shanghai Pudong New Area Administration Centre; from the private sector, the Asian Development Bank, Shanghai Jinmao Group Co. Ltd, Shanghai World Financial Centre Co. Ltd., Pudong Shangri-la Hotel and DTZ; from the local academic community, Li Zhanjun (Pudong Reform and Development Research Institute), Ge Zhenming and Zheng Shiling (Tongji University); several relocated families and the Lujiazui Development (Group) Company Ltd., which was responsible for the development of Lujiazui, Pudong's central business district. As the interviews had to be conducted in Chinese, the present paper presents some of the more recent insights into the latest developments in Shanghai Pudong which have been expressed in English. In contrast to research focused on Hong Kong, little recent research material on Pudong is yet available in English .

sector, the private sector and the rest of society in a global-local interactive context. The paper is structured as follows: section 2 provides a theoretical debate on the contextual condition of PPP and the applicability in the so-called developmental state in East Asian countries; section 3 introduces the background of the urban mega-project - the Shanghai Pudong development and the main development strategies that stimulate complex interaction of global-local, public-private sector, and Chinese-multinational in the development of Pudong. This analysis demonstrates the changes of the local administrative culture through the joint forces of global-local interaction but also reveals how the PPP mechanism reinvents itself to adapt to the specific local Chinese setting; section 4 concludes with key findings on government-market synergy and PPP application in the Chinese context found in the urban mega-project - the Pudong development. Some key lessons that policy-makers can derive from the Shanghai experience are highlighted at the end of the paper.

II. Theoretical debate

The application of PPP is related to a situation in our network society (Castell 1996) “where policy problems have to be tackled in networks of interdependent organisation, both public and private” (Klijn 2005: 328). In this network society, the borders between network organizations are blurred and the traditional clear-cut borderline between the public and the private sector are redefined by an interdependent and intertwined relationship. The network society, as Castells has argued, is derived from the impact of globalization and the increasing role of information technology and therefore works with network logic. Klijn (2005) illustrates the complexity in government’s decision-making process led by networks, in which various actors’ strategies clash. He further proposes two strategies to deal with networks in urban development that have a network-like character: strategies to manage processes within network, or the process management, and strategies to change the characteristics of networks, the strategies of institutional design. However, although institutional design facilitate networking by changing formal or informal rules of accessibility in networks, this strategy is in general “difficult to implement and usually takes a lot of time” due to considerable criticism and resistance (Klijn 2005: 334). Klijn and Teisman (2000) also relate network management to the development of PPP. They argue that in a network society the development of the public-private partnership is actually a process of managing ‘trust’ between actors. The trust should be managed at three levels: public-private interaction in process management to search for an interesting project; public-private partnership to realize the project in project management; and network development to build a line of trust.

The network logic yields for a new government-business relationship in urban development to adapt to the open-structure system. Due to different local setting (local institution and local culture), states may take their distinctive measures to respond to the challenges. Castells names the developmental states in East Asia and the network states in Europe to describe the different strategies different states use to balance the global constrain with local settings. In newly industrialised Asian countries⁵ different forms of developmental state, specific to each society, appear to have been instrumental in processes of nation or city building (or rebuilding). Such states are typically managed by political figures who are *largely autonomous* [our italics] in their societies (Castells, 1998: 289). There have been a series of discussions on the developmental states, including Chalmers Johnson (the first research who introduced the concept), Manuel Castells, Peter Evans,

⁵ The newly industrialised East Asian, refers to Japan, Singapore, South Korea, Hong Kong and Taiwan.

Alice Amsdem and other scholars in the field of development theory. Castells (1998)' defines the developmental states as, "a state is developmental when it establishes as its principle of legitimacy its ability to promote and sustain development, understanding by development the combination of steady high rates of economic growth and structural changes in the productive system, both domestically and in its relationship to the international economy." For the developmental state, "development is not a goal but a means, to become competitive in the world economy, to survive both as a state and as a society." In doing so, a high degree of trust and close relationship between the government and the private sector is of significance to the developmental state (Rueschemeyer and Putterman, 1992). Xia (2000) actually argued that "developmental states can be treated as a mechanism of governance of the political economy that is characterized as a series of networks" since "the East Asian developmental states have all pursued a strategy of networking and have been moving towards network societies."

The economic reform and open-door policy was treated as a survival strategy to 'ensure China's entry into the capitalist global economy and into the informational paradigm, using the lessons from 'Asian tigers', all of which shared a tradition of Confucianist influence. According to Deng Xiaoping, China's Architect for economic reform, "only development is the hard truth. Without development, there will be no stability." Under the developmental state model, the Chinese leadership has been almost completely occupied by the priority of efficiency and growth (Xia 2000: 226). However, there is no actual experience in any other country that could be simply extrapolated to a country with 20 percent of the world's population. Among the different strategies each country applied the "Singapore model" is one approach that was well received and examined among Chinese Communist leaders: "the idea of a fully-fledged economic and technological development process without yielding to the pressure of civil society, and keeping the capacity to maneuver in the global arena firmly in the hands of the state, appealed strongly to a party whose ultimate *raison d'être* was the assertion of China as a world power, if possible coupled with the preservation of the Communist mythology" (Castells 1998: 312). To ensure the success of the reform and the stability of the society undergoing dramatic transition, central government has to navigate the reform measures with extreme caution and pragmatism in uncharted historical waters. The national government still plays a decisive role while local government has obtained more autonomy with respect to economic reform and administrative issues. The caution also allowed China to take the pragmatic gradualist approach in its reforms, meaning that the earliest reforms were conducted in the "experimental fields" such as Guangdong, Shenzhen, Xiamen and later applied in other parts of China if they were proven successful. All Chinese cities and provinces have a part to play in the game that ensures the national goal can be achieved and national interests are protected.

Traditionally, all aspects of urban development in China, including organisation, management and finance, are left in the hands of the public sector, but generally the government has done a poor job of managing urban redevelopment projects. When the local state of Shanghai began the planning and development of Pudong area, it gave a good deal of thought to how this enormous project should be managed. Who should implement it? Where is the money to come from, given that central government funding and local tax revenue will simply not be sufficient? And how is the project to be implemented?

III. Pudong Development

The development of Pudong was the subject of a long-term debate at local level before the project gained support from the central government. Owing to the fact that for many years

there were no bridges or tunnels linking the two banks of the river, Pudong, which is separated from the Bund and the busy Nanjing Road by the Huangpu River, had long been lagging far behind downtown Shanghai in economic development and urban growth. Following this logic of development discussed in the previous section, the strategies to build up Pudong and sustain Pudong's prosperity was orientated toward economic growth. For China's central state and the local state in Shanghai, Pudong development can make use of foreign investment to help Shanghai restructure its economy and position itself as a metropolitan centre of finance, trade and transportation and information technology in the Asian Pacific region and China's 'window to the world'. With a strong motivation to integrate with the global economy, the planning goal of building Pudong as a multi-functional district, incorporating financial and trade, export, tax-free and high-tech sectors, reflects the continuous emphasis of economic development in China's policy. Four main development zones that are designed to target different economic activities in financial and trade, export processing, tax-free and high-tech are to rely heavily on foreign capital and foreign investment, foreign market and foreign technology transfer. Such designation consequently led Pudong to formulate an outward-oriented economy structure that attempts to bring Shanghai onto the world stage.

Figure 2: Master plan for Pudong New Area



In order to prepare a high quality Master Plan as well as a development plan, the local authority in Shanghai not only openly discussed the possibility of the Pudong development but also invited domestic and international experts to discuss the future of Pudong and Shanghai. This was radically different from the normal parochial approach Chinese cities usually take. A clear picture of a new Pudong was established in the first Master Plan of Pudong: to develop a 522-square-kilometre area of Pudong from a mix of old port industry areas, residential neighborhoods and farmlands into a multifunctional modern district with four development zones.

Institutional adaptation

In the designation of Pudong, rather than building up an integrated urban area, the local state of Shanghai preferred to treat Pudong as an enclosed area that executes different regulations than Shanghai's other urban districts. In accordance with the agreement reached with the central government, Pudong followed China's economic development strategy to become one of China's national Special Economic Zones (SEZs), 'an natural enclave for the bird of the market economy' and 'Chinese laboratories for experimenting with East Asian strategy' (Xia 2000: 51) The consideration for such designation reflects the state's selective intervention to stimulate economic growth and private sector's involvement in Pudong's urban development. As a national SEZ, Pudong received special funds provided by the central state for the construction of key infrastructure. Equally important, the original constraints that limited normal urban district in attracting foreign investors and utilizing foreign capitals were eliminated with the acquiring of national SEZ status. Pudong could therefore enjoy the freedom of experimenting with various market innovations and the means to stimulate its outward and export-oriented economy. For example, Pudong was given more autonomy in approving large-scale investment projects; Pudong was also allowed to experiment with a series of areas relating to finance and trade. Shanghai established the first stock exchange centre in China; branches of foreign banks in Pudong were now able to conduct business in Chinese currency. To attract the private sector, especially those from outside China, local government vowed that the Pudong Development should be operated in a free market system through a land market and a real estate market.

To build up trust with the private sector, China's state agencies were obliged to choose a more difficult path in Pudong - engaging themselves in a series of China's institutional reform that allows for a series of networks between the state and the market to grow. The institutional adaptation, as we see in the SEZ designation, was essential to create a network institution that engages the market and private investment in local development. Once the entry rules of the private sector are loosen through the new institution design, public-private interaction could become a norm and public-private partnership can be applied if circumstances allow it.

To further improve the efficiency and effectiveness in the realization of Pudong development, the local authority felt it was essential that an efficient organization should take charge of the Pudong development in practice, by carrying out the development strategies, mobilizing funding and stimulating the private sector, even though that role is traditionally carried out by local government. Shanghai chose a two-layered system to create a capable and efficient administrative body in Pudong's governance. In the upper layer is the political administrative organ - Pudong New Area Administration Committee that governs Pudong; while the lower layer consisted of various public supported development companies taking charge of the development in each zone. For Pudong New Area Administration Committee, its main task is to transmit development recommendations from the local state of Shanghai to the district level and to create efficient administrative services that appeal to investors' need. In order to strengthen the relationship between the state and the market but not involve itself directly in market operations, the local state created the so-called development companies to execute the implementation strategies on site, interpreting government strategy into reality, negotiating with private investors on land transfer, and commute the will of the investors back to the district government and local state of Shanghai. Development companies work as a means for the local state to express its will in the practice of urban development process. On the one hand, they act on the site to ensure the developmental strategy initiated by the local state are realised; on the other hand, they must act upon the market rules and be business-

like. Beside the efforts on administrative restructuring to create effectiveness, the institutional adaptation worked on approval procedure to increase efficiency. To facilitate a quick administrative approval procedure that avoid the usual bureaucratic delays, the 'one-stop' system was introduced to ensure that investors found the process of getting approval for investment projects fast and relatively painless, because all the red-tape could be sorted out at the Pudong Investment Centre. The efficiency in this 'one-stop' system lies in the intertwined institutional linkage and the overlapping of personnel, though which information was efficiently shared and transaction cost between different organisations were reduced.

Land development

Only in April 1988 was China's constitution amended to allow the temporary transfer of land-use rights away from the state. Land lease involves the transfer of land-use rights or land development rights. China has no intention of creating a capitalist-style land market involving the transfer of full ownership rights, but seems prepared to separate use and management from ownership; despite the commercialisation of land use rights, state ownership remains intact.⁶ The primary rationale behind this and subsequent reforms is to attract foreign investment in property and to increase economic efficiency by restructuring the system of land supply and allocation (Olds, 2001: 173)⁷. Pudong is the first urban area in China that requires all organisations wishing to involve in real estate development in Pudong to lease land-use rights⁸. Land leases can be obtained for periods ranging from forty to seventy years and are sold by direct negotiation, by tender or by auction. Since 1988 Shanghai has made heavy use of land leasing to attract Foreign Direct Investment (FDI), restructure the city, generate capital for infrastructure projects and fund new residential housing, mainly in suburban locations (Olds, 2001: 184). In approximately ten years Pudong has obtained more than 100 billion yuan (US\$ 12 billion) from land leasing, most of which sum has been invested in infrastructure.

Land development in Pudong is facilitated by the four newly established property development companies. Initially the big four had little money, but one priceless asset - land. Soon after they were set up they were allowed to get hold of a certain amount of land from the municipal land office at a relatively low price. The local state of Shanghai's investment in the initiative fund made it a major shareholder in every development company, so gaining a voice in the way each zone was developed. Thus the development companies, in part representing the government, developed the land and sold the land-use rights. To speed up land development the development companies sometimes set up partnerships with private developers in the form of a joint ventures or co-finance agreements (Chen, 2003:109).

⁶ State ownership of land remains the guiding principle in Chinese land policy; only land-use rights are being commercialised.

⁷ Shanghai started to charge land-use-right fees to foreign investors in 1986. The 'Regulations for the Transfer of Land Use Rights for Valuable Consideration in Shanghai' drafted on November 29th, 1987 symbolized the first formal shift towards citywide land reform in Shanghai. This regulation came into effect on January 1st, 1988. In the same year, the first land-leasing project was conducted in Hongqiao District in Shanghai, joined by foreign real estate developers. The 1.29-ha land block was leased at 485 US\$/square meter by a Japanese developer. The leasing price is fixed according to the square meter construction area to be built rather than the raw land area used before. This price also includes the provision of infrastructure by the government. After the experiment of land leasing project in Hongqiao, transfer of land-use-rights or land-development-rights have become standardized in Shanghai, especially in the development of Pudong. Besides regulating land leasing, Pudong used a 'land bank system' to ensure that enough land was held in reserve for further expansion. The Pudong New Area covers 520 km², of which 300 km² is still farmland. Under this policy, the government expropriates certain farmland according to the master plan before the land is actually required for use, paying 30% of the current expropriation compensation as deposit against the acquisition of the farmer's land. The remaining 70% is paid when the land is required for use.

⁸ According to the draft 'Regulation on Pudong New Area Planning and Construction Administration' and 'Regulation on Pudong New Area Land Administration' all organisations and real estate developments need to obtain the land leasing rights in Pudong in 1990.

Finance for infrastructure

Shanghai has an active financial unit involved in the search for more channels of investment in infrastructure. In 1988 the local state of Shanghai founded the Shanghai Urban Construction Foundation to take charge of the development of Shanghai's urban infrastructure. In 1992 this foundation was reconstituted as the Shanghai Urban Construction Company to increase its commercial flexibility. The foundation, and later the company, took the novel step of not only investing public finance in the project, but also searching for alternative sources of finance to supplement the shortfall in public finance (Zhou, 2003: 177). Between 1990 and 1999 a total of 77.4 billion yuan (US\$ 9.3 billion) was invested in the development of infrastructure in Pudong, 40% on civil engineering projects, 35% on transport and telecommunications, 13% on power and 12% on public services. The money required for this huge investment was raised from a combination of public funds and private investment sourced both domestically and internationally. A certain amount of finance was obtained from multinational institutions. For example, the Nanpu and Yangpu bridges (Asian Development Bank, 1997a, 1997b) were financed by a low-interest loan obtained from the Asian Development Bank. Other finance was obtained from private sources. In 1994 a subsidiary of the Shanghai Urban Construction Company sold a short-term lease on the right to operate the Nanpu and Yangpu bridges and the Dapu road tunnel to CITIC Hong Kong (Holdings) Ltd. for 2.5 billion yuan (US\$ 0.3 billion). The proceeds were used to build the new Xupu Bridge across the Huangpu River. The latest experiment directly involving private finance used the BOT (Build, Operate and Transfer) system. The Lupu Bridge was built and financed this way by six companies led by the China State Shipbuilding Corporation and Jiangnan Shipyard (Group) Co. Ltd.

As The local state of Shanghai's faith in the market and the private sector increased, finance for the building and operating of infrastructure came less from public finance and more from private investment. Collaboration with multinational institutions such as Asian Development Bank and the World Bank taught the local state of Shanghai how to work with non-governmental organisations. The experimental leasing of operating rights and subsequent issue of public bonds, helped Shanghai to obtain amounts of finance which were not available from public sources. These successful experiments led the local state of Shanghai to extend its collaboration with the private sector in public service projects, even allowing the private sector to take over certain tasks in their entirety.

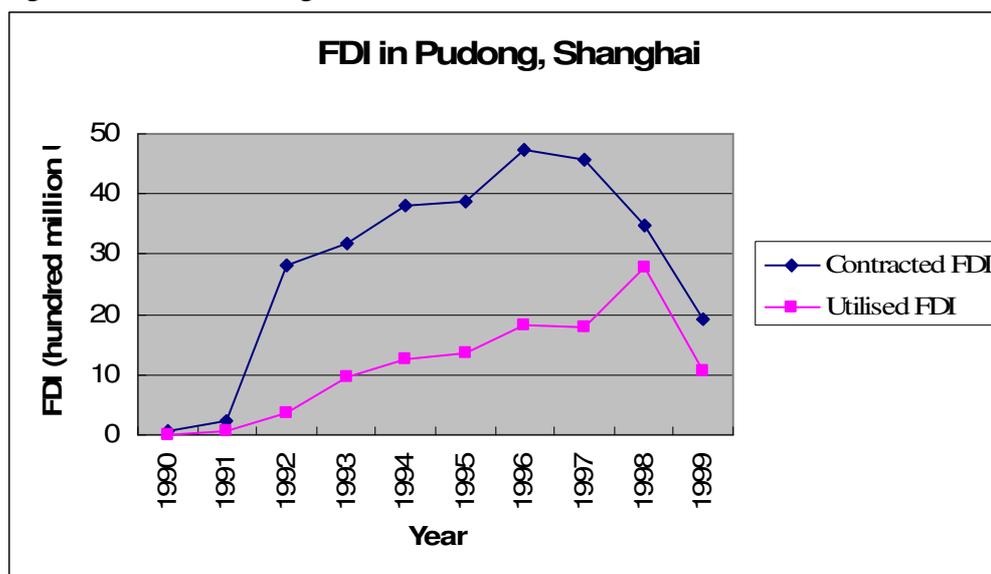
Combining global and local - globalising financial flows

Private finance and credit is becoming increasingly available on a global scale, outside the bounds of national control (World Bank, 1991; Sassen, 2000). Most private sector investment in Pudong from foreign countries comes from the overseas Chinese business network. Overseas Chinese feel themselves more strongly tied to China than, for example, overseas Indians to India. This is perhaps the main reason why although other Asian countries can implement similar policies to attract FDI, they are not nearly as effective as those implemented by the Chinese. In the early days only a handful of international companies with a strong capital base entered China. These companies invested in what were essentially 'pilot projects', designed to explore the Chinese market; even if they failed there would still be other profitable markets outside China. This was a very different situation from that of the overseas Chinese business network, in which many enterprises are medium-sized or small. The better understanding of Chinese culture of the overseas Chinese makes them more willing than other investors to risk investing in the Chinese market, however immature and risky such investment may be. Faced by risk, overseas Chinese can turn to a network (*guanxi* in Chinese) for informal assistance. Global Chinese

business networks have played a key role in initiating and stimulating the growth of the Chinese market, achieving the success and high yields required to stimulate further interest and FDI. The investment from overseas Chinese even enabled some smaller companies to expand and gain recognition in China and abroad from operating in the Chinese market. The most important reform initiatives underlying the development of Pudong in general, and Lujiazui in particular, involved the active encouragement of as much as US\$ 14.5 billion of FDI in Pudong. This emphasis on FDI reflects the fact that FDI has been the key factor in making possible the rapid development of the Lujiazui central finance district. By the end of 2000, 67 countries had invested US\$14.5 billion in 6,635 enterprises in Pudong. Hong Kong, the United States and Japan were the top three investors, contributing 23.27%, 19.39% and 15% respectively to the total contracted FDI (Wan and Yuan, 2001).

The priority given by the World Bank (WB), the Asian Development Bank (ADB) and United Nations Development Programs (UNDP) to its investment in Shanghai coupled with the special treatment given by the World Trade Organisation (WTO) show that these institutions were eager to integrate Shanghai into global economic and financial systems. The process was facilitated by the Chinese Government, which relocated the Shanghai branches of the People’s Bank of China (the Chinese central bank) and China's four other large banks, from Beijing to Shanghai-Pudong to assist in establishing a national centre in Shanghai (Yulong and Hamnett, 2001: 133). All these links with the ‘global world’ have helped to channel funds to Shanghai and to accelerate the city's globalisation.

Figure 3: FDI in Pudong



Source: Shanghai Pudong New Area Statistical Bureau (2002)

IV. PPP in Pudong development

The pragmatic approaches the development companies adopted to develop Pudong underlines a new approach towards the urban development process, different from the traditional way that the public sector took on financial and management responsibility. To implement a mega-project such as Pudong it is impossible to be dependent on the limited local public finance. Even though local government made efforts to mobilize its local budget to invest in key infrastructure upgrading projects, it could not ignore the great potentials of the private sector in the Pudong development. Nor could central government bridge the financial gap that Pudong needs to overcome in rebuilding itself from a virtually

empty area. The involvement of non-public funds and funding mechanisms became a necessity. By involving non-public organisations, local government could explore a new capital market. The Pudong development is an interesting urban redevelopment case to examine PPP since so many different actors have been involved in the development process. For the first time, urban planning and urban development are not only the task of the public sector, but the collective responsibility of a broad-based range of stakeholders. This interactive approach has been even more common in the implementation stage to gain financial and public support. This is different from the traditional Chinese approach to urban redevelopment, in which the public sector and public finance play central roles.

Public-private interaction in process management

The research of De Bruijn, Ten Heuvelhof and in't Veld (2002) shows that facing the complexity decision-making process in networks, neither command and control nor project management are effective; on the other hand, process management offers a solution: to reach decisions, invest in a structured interactive process. To design a process, they pointed four core elements: Openness, protection of core values, speed and Substance. To examine the public-private interaction in Pudong development, we borrow these elements as a reference. Facing the huge development task in Pudong, the government realised that the public sector alone could not come up with the required capital and expertise. Involving the private sector has become an increasingly important theme. It is not an easy task to build mutual understanding and trust with the private sector in an environment where the public sector used to dominate daily life while the private sector struggled to survive in China. Local government began to openly consult the private sector for advice and later build up a series of preferred policies to break down the barriers and reduce taxes for the investors. While the Pudong development plans were being heatedly discussed, the private sector started to show interest in their business potential. As a result of the interaction between the two sides, the local planners experimented with the drawing up of a master plan that is more flexible and adaptable to the private sector. They also experimented in the new land use plans by taking into account the land values. This was an innovative measure in a time when a land market was not yet established in Shanghai. This preparatory work helped Pudong to form a Chinese version of a land market, a measure to explore the infant local real estate market. The measure proved to be the right direction for Pudong.

To make the process more adaptable and long-term oriented, the government invited different parties both domestically and internationally to provide further advice to improve the master plan and the feasibility studies of individual key projects. As has been stated before, with more private sectors joining the process, the public sector hoped that more private finance could be attracted to invest in Pudong and boost the real estate market. Therefore, the public sector took a more easy-going attitude towards PPP and its implementation, in the name of "attracting alternative finance or private investment". Foreign banks are allowed only in Pudong to conduct Chinese currency (Renminbin) business, which was prohibited in every other area in China in the early 1990's. Chinese companies have been allowed to establish their own foreign trade companies in Pudong since 1990 even though Chinese companies elsewhere were not allowed to conduct import-export business directly with foreign countries but had to go through state-appointed trading companies with exclusive foreign trading representative rights. To boost the confidence of the private sector to invest in underdeveloped areas, central and local government established a series of preferred policies to attract investors. As a result of these preferred policies, various actors showed growing interest in participating in Pudong's development process. The actors involved came from an unprecedented complex

mix of local, regional, national and international levels, ranging from public organisation, public-funded agencies and organizations, NGO's, banks and most important of all, the private sector.

Compared with the public-private interaction in similar urban redevelopment projects in Western European countries (for example, the Kop van Zuid project in Rotterdam or the London Docklands development in London), the process of public-private interaction in the Pudong development has several differences (Wigmans 1998, 2001): firstly, the process is of limited openness. It is still local government that dominates the decision-making process for the development process, deciding whether to involve external stakeholders or not, whom to invite and to what extent. The private sector has the capital and expertise but also has the freedom of being able to be involved or not. The urban planning and the administration system restrict the openness of the decision-making process by limiting the number of voices; secondly, in the Pudong development the emphasis is on the speed of the development. Therefore all efforts, including involving the private sector, are geared to stimulating investment and speeding up development. This is quite different from what we see in the European cases, where the openness is given more consideration. The same attitude can be found in other Chinese cities which are currently under redevelopment; thirdly, we observed the increasing role of the Chinese global business network in the contribution of FDI in Pudong. The investment from Hong Kong and Taiwan accounts for almost half of the total FDI in Pudong. Besides, many of the international investors have a Chinese background. The Chinese global business network actually has become a mediator linking the local Chinese economy to the global capital market. It provides a good channel to bring in funding, modern techniques and information to the relatively closed Chinese local society.

Mutual trust and understanding between the public and private sectors have to be built up in a system that allows and even encourages the public and private sectors to collaborate. Sometimes the laws and regulations need to be improved in order to support this collaboration. But most important of all, the mentalities of the different parties have to be communicated with each other so that each can understand the culture of another. The process could be managed at the process management level, where the public and private sectors, the public sector at the central and local levels, and the public sector and Non-Governmental Organisations (NGO's) communicate and cooperate with each other. This process could also be achieved at the project level, where public-private partnership projects are implemented.

Public-private partnership

In the Pudong development, we find that attracting private investment, rather than the mechanism of public-private partnership, is the emphasis of local government, contrary to what happens in urban development projects in the US and Western European countries. Therefore, the application of public-private partnership is more flexible in its forms and much more result-oriented. In general there are four aims a project hopes to achieve by exploring PPP strategies: to obtain finance; to accelerate the speed of urban development and redevelopment; to improve efficiency in public services; and to achieve social goals where the interests of the private sector fall short. In Pudong we observe the use of public-private partnership in several kinds of projects, for example, land development, urban renewal and infrastructure projects. The earliest attempt to involve non-public sector was in the construction of the Nanpu and Yangpu bridges, as we have mentioned before. Later collaboration between the public sector and the private sector focused on the land development. For example, the Fortune World Company joint venture is an example of the

public sector obtaining funding through private financial channels to complete the land development. The Lujiazui Development Company worked together with the Chiatai Group (Thailand) to develop a 50 hectare area of land. They share not only the cost but also the risk and benefits as well. A similar joint venture was also set up between the development companies in Pudong and private developers or banks. At the end of 1990's, the public sector used its co-financing strategy to boost low cost-return urban renewal projects involving private developers. Orchid Park is such a PPP example. The Real Estate Bureau under the Pudong New Area Administration Centre provided 400 million Yuan (48 million US\$) to co-finance this redevelopment project under a contract formed with developers. After 2000, the public sector started using BOT and BOO (Build, Operation, Ownership) to attract private investment into public facility projects, such as water management and green area development (Chen 2003).

The evolution of the PPP strategies reflects the changing environment faced by Pudong during its development. At the beginning, local government had little money and experience. It needed the help of the private developer. When the development came on track and the key infrastructure projects were completed, more investors showed interest. However, few are interested in high-risk and low-return projects, such as an urban renewal project. The co-financing approach helped to attract more investors to these projects. After a dozen years of development, Pudong has re-established itself with a new image and high quality standards. The local government hopes that by involving the private sector through BOT or BOO, the private sector, especially international investors, could bring in advanced technology and management skills.

We have observed in these projects that the public sector has reinvented itself to be more business-oriented, more efficient and more target or service oriented: a so-called local state corporatism or mixed entrepreneurs. Although local governments and officials in China are part of the administrative apparatus, part of the 'state', they are also distinct entities separate from central government and the rest of society, with their own agendas, and increasingly with their own resources. This is especially true of the newly established development companies. These companies represent pre-eminently the frontlines of entrepreneurial Chinese (local) s They operate relatively autonomously and are far removed from a central planning doctrine that operates top-down. Spreading over the city and operating at the district level these companies are working bottom-up, simultaneously occupied with several building projects in which private developers and investors from all over the world are participating.

V. Conclusions

The transformation of cities under the impact of globalization and the evolution of actors that operate in the urban redevelopment context brings a dynamism to the cities and an interaction between the local and global scales. In many large urban redevelopment projects, the actors actually originate from beyond the city boundaries, with an increasing penetration from the global level. Public-private partnerships arise from the global-local network society and therefore need to manage the dynamics and tension between the traditional local bureaucratic system and the increasingly open structure of the network society. How that tension is managed at the local level ultimately determines the success and/or failure of the public-private partnerships (Chen 2004).

Figure 4: Pudong in 2004



Various evidence points to an evolving policy process in Pudong to manage the changing environment and different challenges faced during the development of Pudong. These policies and their implementation also present a number of strong characteristics that define the method of steering and maneuvering Pudong's development. The urban development of Shanghai Pudong was facilitated by a developmental state adopting an open-door policy. The development strategy in Pudong is shaped by the motive of economic development. During the decision-making process through to the implementation phase, an active local government influenced the development process both with a 'visible hand' and 'invisible hand', depending on the circumstances and necessity. The adoption of the national SEZ concept in a mega urban development project and various experimental policies applied to Pudong also reminds us of the similar kind of tactic China used to stimulate its economic growth and foreign investment. In the management strategies that Shanghai adopts in developing Pudong, we can see China's use of a developmental state model. The activities of the development companies illustrate the way the developmental state, assisted by local state corporatism, sets up local connections with global networks. The explosive growth of Shanghai over such a short period was largely the result of ad hoc decisions made by a great variety of participants, with disparate interests, making compromises, resolving conflicts and forging alliances, all triggered by policies of economic reform.

In this article we analyse the role of the public sector, the private sector and their collaboration in different forms of public-private partnership mechanisms. Whether their collaboration is achieved at the process level or the project level, the Pudong development shows some distinctive characteristics due to the fact Pudong development is implemented in the Chinese national setting. The specific Chinese political, economic and social environment factors include:

Firstly, the public sector continues to play a central and dominant role in the Pudong development and in the projects in which PPP is applied. The traditional bureaucratic structure has not yet been superseded by a new openly structured system that

is favoured by the growing network society. The public sector, especially the local state of Shanghai, maintained an “ownership” position in directing the design and implementation of the Pudong development, taking the decisions itself though consulting with the private sector, both domestic and foreign. It is possible for the public sector to maintain this position because of the resources it keeps in hand: state-owned land and expropriation rights; the right of approval for design and construction; and the power to mobilize people, households and society. Though the state intervention in a government-dominant society, strong political leadership will play an important role in initiating the idea, putting forward opinions and stimulating development by expressing ideas and support to the private sector. However, as the global-local axis becomes more salient, the traditional top-down structure will lose ground, as we see in the Pudong projects. The local level could even bypass the bureaucratic structure to enable horizontal collaboration through the pioneering mediator and development companies.

Secondly, the designation of SEZ status of Pudong reflects the pragmatism of the Chinese state in term of exerting the state intervention. On the one hand, the choice of institutional design create the best facilitate the market. On the other hand, using an enclave to experiment with these institutional adaptations creates a buffer zone to reduce the enormous social impacts towards involved stakeholders. In this way, Chinese state limits the damage of potential criticism and resistance to a minimum. In such a way, the most effective but most difficult strategy to manage the network has been flexibly applied in Pudong to involve private sector.

Thirdly, the flexibility in enabling public-private interaction or arranging public-private partnership mechanisms reflects an important Chinese belief: the result, rather than the means to achieving it, is more important. This pragmatic approach taken by Chinese reformers and urban managers helps them to quickly take useful experiences from others and adapt them to their own situation. This approach also enables them to react quickly to different situations and difficulties. In order to pursue market-oriented reforms, Shanghai has shown to be creative in borrowing and applying free market concepts and adapting them to fit in existing ideological constraints. Many useful experiences of the free market and new financial mechanisms have been ‘borrowed’ and actively used in the Pudong development. Several forms of capital markets were established in Pudong, including a stock market, a securities market, a futures market, a gold market and a ‘property rights exchange centre’. Several ‘free market principles’ are also used to guide the reform of the urban land markets. A new feature of this Shanghai land policy is the designation of specific, experimental zones with the identification of priorities and facilities in order to stimulate private initiatives and to test reactions from the free market. These measures encouraged competition between districts within a city such as Shanghai and also between cities in China, especially among the ‘open’ coastal cities.

Fourthly, the involvement of FDI and the significance of the Chinese global business networks reflect the complex global-local link in the Pudong development. The form of the urban design and the dominant activities within a given city reflect an increasing degree of linkages to global capital markets. The urban development process in Pudong-Shanghai enables the local government to attract FDI but at the same time the central government loses control over the management and the complex financial structures and the many capital transfers with the world that are generated for the urban development of Pudong-Shanghai. The financial mechanisms in Pudong demonstrate the difficulties of the state. When the local financial system is integrated into the global financial system of capital flow, the state faces increasing difficulties in controlling the flow of capital and to overseeing all the different joint ventures, each having its own specific way of generating funding.

The explosive growth of Shanghai in such a short time has mainly been the result of ad hoc decisions by many different actors, with diverging interests, making compromises, resolving conflicts and forging alliances, all of which are triggered by economic reform policies. The developmental state, facilitated by local state corporatism, with local connections to the global network, proves that the government is invariably exposed to powerful global forces. This is in essence the logic of globalization. The process of globalization and the outcome of the development process (urban and financial) challenges the autonomy of the state. Full integration into the market economy makes it increasingly difficult for the government to stand aside. The developmental state cannot stand isolated from and unaffected by the impact of the globalization process (Chen and Wigmans 2005).

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LEADERSHIP IN CONSTRUCTION PARTNERING PROJECTS: RESEARCH METHODOLOGICAL PERSPECTIVE

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ABSTRACT: In recent years there has been a growing interest in the use of partnering in construction. Central to any successful partnering arrangement is the change in cultural and behavioural characteristics towards mutual trust and understanding. According to Schein, cultural and behavioural characteristics can be shaped and reflected by proper leadership. This research probes leadership as the response to address complex relationships of behaviour and culture in large scale partnering projects. This involves understanding, interpreting, explaining and mapping complex human behaviour. Therefore it is very important to comprehend and implement a suitable research methodology to carefully extract appropriate information. This paper justifies the social constructionism stance and case study approach for the leadership study as the response to address complex relationships challenges of behaviour and culture in construction partnering projects. For this purpose, the nested approach is used, highlighting the main facets of the arguments to justify the selection of appropriate research philosophy and research approach.

Keywords – Partnering, Leadership, Research Methodology

1 INTRODUCTION

Management research deals fundamentally with the production and legitimation of the various forms of knowledge associated with the practices of management. The approaches to management research and knowledge creation involve a varied combination of the key processes of observation, reflection, theory conjecturing and testing of theories and model developed to capture the essence of management realities. Therefore it is unwise to conduct research without an awareness of the philosophical issues that lie in the background. Research should be organised systematically to make the best use of the opportunities and available resources. In this regard, this paper attempts to outline available research philosophies and approaches, while logically justifying the use of appropriate research methodology to ‘identify appropriate leadership styles and practices to address the cultural and behavioural challenges associated with partnering projects in construction’. For this purpose, the hierarchical model of research methodology by Kagioglou et al. (1998) is used, highlighting the main facets of the arguments to justify the selection of appropriate philosophical stance, research approach and research techniques.

2 BACKGROUND

The UK construction industry is one of the strongest in the world, with output ranked in the global top ten construction industries (DTI, 2004). It is considered as one of the pillars of the domestic economy, with its capability to deliver the most difficult and innovative projects, matches that of any other construction industry in the world (Egan, 1998). Nonetheless there is a deep concern that the industry as a whole is underachieving. Problems such as low and unreliable demand and profitability, lack of research and development, inadequate investment in training, its current approach to the usage of tender price evaluations, an adversarial culture and fragmented industry structure, are widely

recognised. These problems must be addressed if the industry is to modernise and to improve performance (Latham, 1994; Egan, 1998; Santos and Powell 2001; NAO, 2001; Fairclough, 2002). Successive independent reviews of construction have emphasised the need to improve the culture, attitude and working practices of the industry.

As a follow up to recent industry commissioned reports, several support divisions and programmes were inaugurated to improve the performance to the world-class standards. According to Oakland (2001), excellence can be defined as 'Achieving world-class performance', thus much research in the construction industry in recent years has been focused on 'achieving construction excellence'. Study on evolution of business excellence revealed that the principles of 'business excellence models' and 'constructing excellence' shares the common objectives of 'delivering world-class products and services'(Thurairajah et al., 2005). A comparison of construction industry concepts with internationally recognised business excellence models was carried out to find resemblance and disparity in the application of excellence concepts. Results clearly indicated the significance of leadership element in excellence concepts (Thurairajah et al., 2005). In this regard, a leadership study in construction was selected as the primary area of research.

3 RESEARCH PROBLEM

In addition to the excellence concepts in recent industry commissioned reports, it has been found that there is a growing interest in the use of partnering in construction (Bresnen and Marshall, 2000a; Dainty et al, 2001; Wood and Ellis, 2005; Ingirige, 2004). Partnering and the related forms of collaboration have been seen as a way of dealing with the fragmentation and lack of integration that have bedevilled attempts to improve project performance over the years (Bresnen and Marshall, 2000a). This represents perhaps the most significant development to date as a means of improving project performance, whilst offering direct benefits to the whole supply chain (Larson and Drexler, 1997; Wood and Ellis, 2005). Many commentators argue that partnering can have a substantial positive impact on project performance, not only with regard to time, cost and quality objectives, but also with regard to more general outcomes such as greater innovation and improved user satisfaction (Latham, 1994; Bennett and Jayes, 1998; Bennett et al., 1996; Bresnen and Marshall, 2000c).

Partnering has been defined as 'a long term commitment between two or more organisations for the purpose of achieving specific business objectives by maximising the effects of each participant's resources (Bresnen and Marshall, 2000a). While there is an agreement about this overall philosophy of partnering, there are varying views on its features. This includes wide range of concepts capturing culture, behaviour, attitudes, values, practices, tools and techniques. Despite the fact that commentators place considerable emphasis upon the importance of changing attitudes, improving interpersonal relationships and transforming organisational cultures, very little of the research has explored in the social and psychological aspects associated with the successful integration of partnering (Bresnen and Marshall, 2000a; Wood and Ellis, 2005). Managing and leading such a complex supply chain towards its objective and shared benefits needs a better, appropriate leadership throughout the project. A lack of empirical evidence indicates the necessity of leadership research in construction partnering projects to achieve specific business objectives by maximising the effectiveness of each participant's resources and establishing ongoing business relationships. The requirement for a suitable leadership to lead the supply chain towards its objectives forms the basis of the research need of the study.

4 RESEARCH FOCUS

Central to any successful partnering arrangement is the change in attitudinal and behavioural characteristics towards mutual trust and understanding. Green and McDermott (1996; Bresnen and Marshall, 2000a) argue the attitudes and the behaviour evident in the construction industry are deeply ingrained and that it is difficult to engineer any rapid movement away from such an embedded culture. Much of the literature tends to presume that cultural alignment is a prerequisite for partnering. Since partnering is seen as changing behaviours and attitudes cultural transformation cannot be forgotten in the process. Bresnen and Marshall (2000a) stress the importance of decentralised, flexible structures, where the team is expected to operate with considerable autonomy and discretion to convert formal partnering arrangements into real differences in behaviour at operational levels.

The significance of cultural and behavioural challenges on partnering related collaborative methods, together with lack of empirical evidence of leadership literature in construction clearly indicates the need for leadership research in construction partnering projects. Furthermore, recent growth in the contribution of partnering projects to construction output justifies the selection of partnering projects. For example, total investment of £ 42.69 billion from public sector in 2004 on PFI projects (HM-Treasury, 2005) and £ 6.8 billion from BAA (2005) on partnering indicates the extent and the importance of partnering projects in UK construction. However for the purpose of this research, large scale partnering projects will be selected due to the significance in contribution to the total output of construction industry. Also large scale partnering projects may extend over several years with the involvement of various participants from the entire supply chain. This results in a short term natured organisation with shared benefits as the common objective. Research will focus on leading such partnering arrangements, to understand and address the complex nature of cultural and behavioural challenges.

According to Bresnen and Marshall (2000b), there are limitations to the use of contract incentives as a motivational tool in partnering projects and often broader organisational goals were more potent influences on behaviour. Therefore it is important to develop collaboration which does not rely simply upon devising appropriate incentive mechanisms, but instead embracing a wide range of supporting internal policies, systems and practices (Bresnen and Marshall 2000c). As discussed in research problems, leadership can be employed to devise supporting internal policies, systems and practices to address the challenges due to cultural and behavioural diversity in partnering projects. Also the existing research fails to concentrate adequately with the complex relationship between individual or group behaviour and organisational culture (Barlow and Cohen, 1996; Bresnen and Marshall, 2000c) which, nevertheless lies at the heart of many prescriptions for improving collaboration within the industry (Bennett and Jayes, 1998). This research probes leadership as the response to address complex relationships of behaviour and culture in large scale partnering projects.

5 RESEARCH AIMS AND OBJECTIVES

The aim of the research is to identify appropriate leadership styles and practices to address the cultural and behavioural challenges associated with partnering projects in construction.

In this process, a comprehensive literature survey will be done to understand leadership concepts and challenges related to partnering projects. This ‘theory development’ towards leadership practices in addressing behavioural and cultural challenges of partnering projects will provide strong guidance in determining what data to collect and the strategies for analysing the data.

Following objectives are formulated to develop a framework of ‘critical success factors of leadership’ to improve performance by addressing cultural and behavioural challenges associated with construction partnering projects.

1. Identify the cultural and behavioural challenges in construction partnering projects
2. Explore the range of current leadership roles and practices adopted in construction partnering projects
3. Identify and evaluate leadership practices to address behavioural and cultural challenges of construction partnering projects
4. Develop a framework of ‘critical success factors of leadership’ to improve performance in construction partnering projects
5. Propose the leadership practices in construction partnering projects

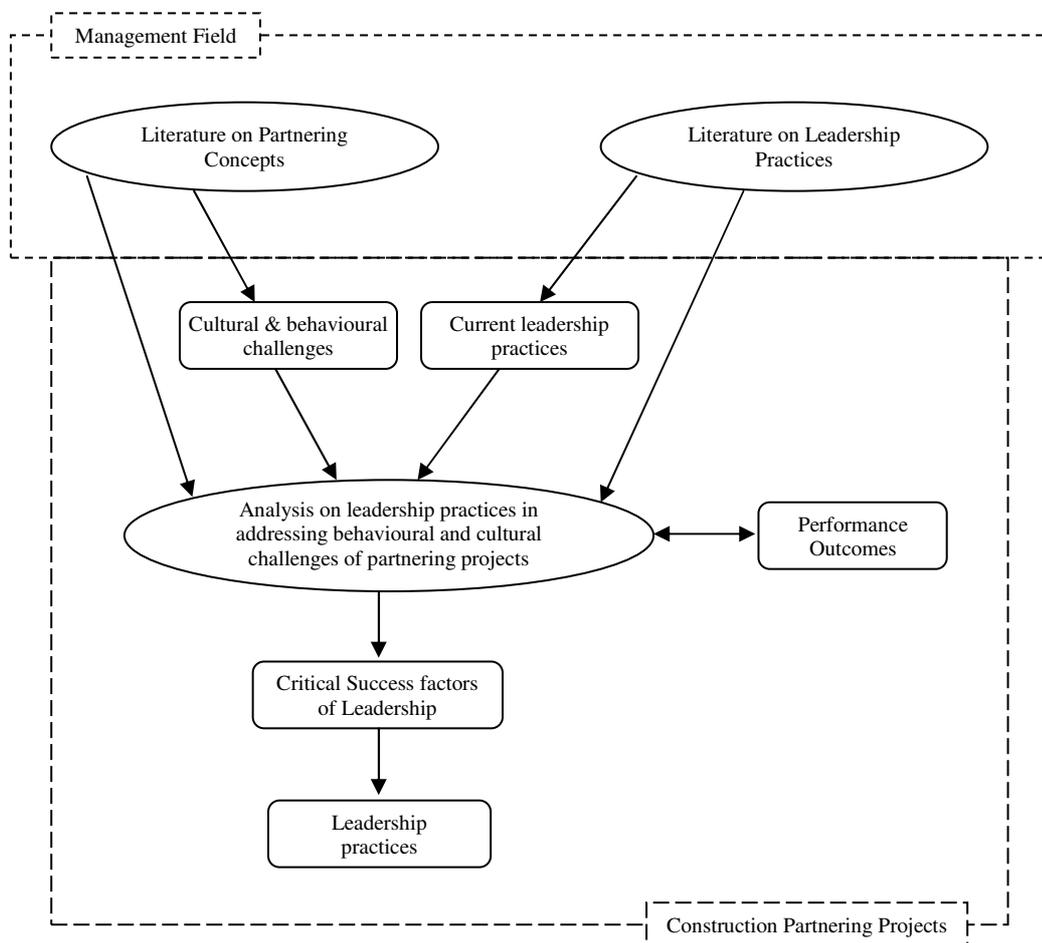


Figure 1: Research conceptual model

Figure 1 illustrates the research conceptual model devised on the literature review and synthesis. Cultural and behavioural challenges in partnering, current leadership practices and literature synthesis will be used for theory building and analysis to fulfil the research aims and objectives. Further to facilitate this process, research questions its propositions are identified in the following section.

5.1 Research Questions

Collis and Hussey (2003) suggest the choice of research questions instead of research hypothesis as the appropriate method of defining research propositions in a phenomenological study. The preference of research questions for this study is further justified by the exploratory nature of this research. Following principle research questions are formed based on the identified theoretical gaps, to fulfil the above stated aims and objectives. This takes the form of two ‘grand tour questions’ (Collis and Hussey, 2003), each with two ‘sub questions’, which will be further discussed in ‘research methodology’ section.

1. What are the current leadership roles and practices adopted in construction partnering projects in addressing major cultural and behavioural challenges in construction partnering projects?
 - i. What are the root-causes of cultural and behavioural challenges?
 - ii. How does current leadership tackle these root causes and challenges?
2. How can the leadership address these cultural and behavioural challenges in construction project partnering?
 - i. What are the ‘critical success factors of leadership’ in addressing these challenges?
 - ii. How these ‘critical success factors of leadership’ can be practiced in construction partnering projects?

6 RESEARCH METHODOLOGY

Research methodology refers to the overall approach to the design process from the theoretical underpinnings to the collection and analysis of the data (Collis & Hussey, 2003). For this purpose, the hierarchical model of research methodology by Kagioglou et al. (1998) is used. This conceptual model (Figure 2) maintains the direction and cohesion of elements in representing a holistic research methodology. Within this nested approach, the research philosophy found at the outer ring “guides and energises the inner research approaches and research techniques” (Kagioglou et al, 1998)

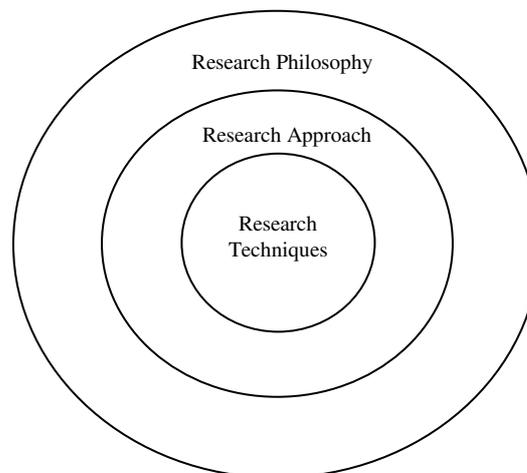


Figure 2: Research methodology ‘nesting’ (Kagioglou et al, 1998)

6.1 Research Philosophy

The research philosophy is principally concerned with the assumptions that a researcher brings to an investigation. Although there is considerable blurring, the two main traditions of philosophies can be labelled as positivism and social constructionism/phenomenology (Collis & Hussey, 2003; Easterby-Smith et al, 2003). While positivists argue that the world exists externally and its properties should be measured through objective methods, social constructionists hold the view that the reality is not objective and exterior but is socially constructed and given meaning by people (Easterby-Smith et al, 2003). Table 1 outlines the contrasting implications of positivism and social constructionism.

Table 1: Contrasting implications of Positivism and Social Constructionism

| | Positivism | Social Constructionism |
|---------------------------|---|--|
| The observer | Must be independent | Is part of what is being observed |
| Human Interest | Should be irrelevant | Are the main drivers of the science |
| Explanations | Must demonstrate causality | Aim to increase general understanding of the situation |
| Research progress through | Hypotheses and deduction | Gathering rich data from which ideas are induced |
| Concepts | Need to be operationalised so that they can be measured | Should incorporate stakeholder perspectives |
| Units of analysis | Should be reduced to the simplest terms | May include the complexity of 'whole' situation |
| Generalisation through | Statistical probability | Theoretical abstraction |
| Sampling requires | Large numbers selected randomly | Small numbers of cases chosen for specific reasons |
| Methods used | Experiments, Surveys, Case study, Simulation, Modelling | Case study, Ethnography, Action research |

Source: Adopted from Easterby-Smith et al, 2003

By considering the above listed characters social constructionism approach deemed to be more appropriate to this research than the traditional positivist philosophy. As set out in aims and objectives, this research is aimed to interpret and increase the understanding of leadership practices to address the cultural and behavioural challenges. This is largely a theory building attempt by inductive methods of data gathering and it focuses on in-depth study with in uncontrolled environment. Furthermore, research involves the investigation of complex interaction between leaders, followers, teams and processes in real life context. This leads to research the subjective aspects of human activity, focusing on the meaning rather than measurement of leadership phenomenon. Involvement of leadership phenomenon holds a very high degree of believe that the reality is dependant on the mind.

and the interpretations which are drawn from them (Collis & Hussey, 2003). As the undertaken research is of interpretative nature and value laden, a social constructionist approach is more suitable.

By analysing ontological, epistemological and axiological assumptions of the research, the philosophical positioning of the research is shown in Figure 4. While taking an idealist view in ontological assumptions it holds social constructionism stance in epistemological undertakings with value laden axiological position. As guided by nested approach this philosophical positioning influences the selection of appropriate research approach as described in the next section.

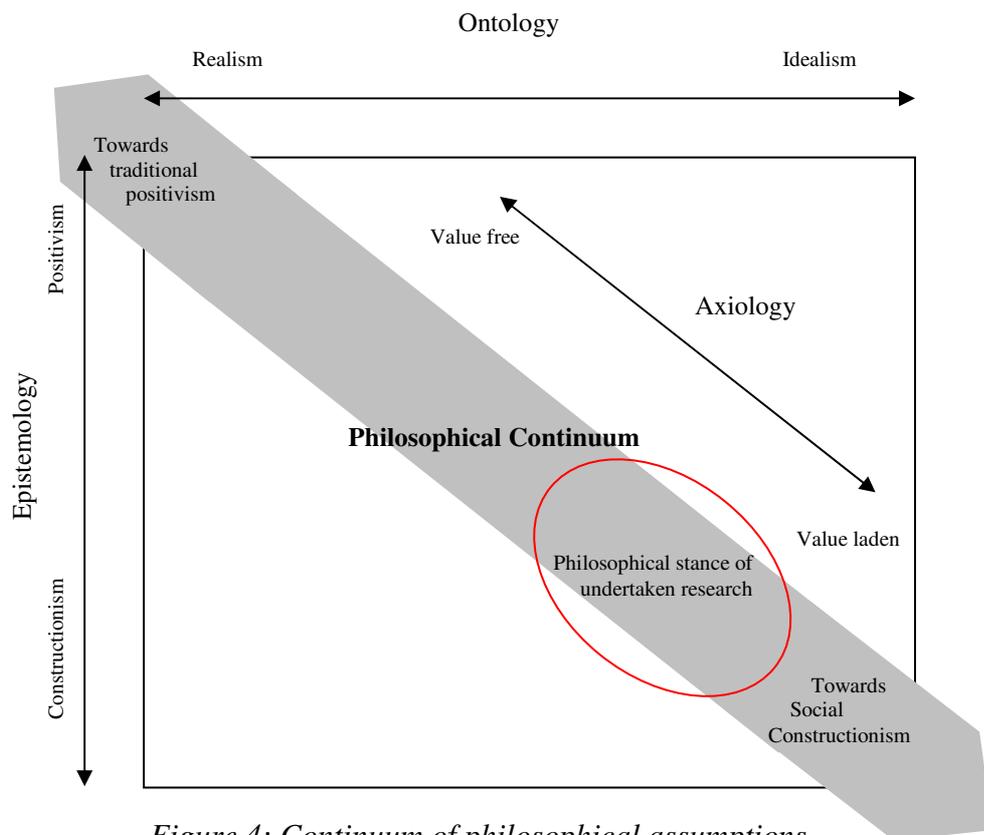


Figure 4: Continuum of philosophical assumptions

6.2 Research Approach

Research approaches are about organising research activity and embodying data collection, in ways that are most likely to achieve the research aims. They are guided by philosophical underpinning and energise the appropriate methods of research techniques. According to Easterby-Smith et al. (2002), five out of six key conditions in choosing appropriate research approach, closely relate to the basic dichotomy between the use of positivist and social constructionist approaches. As such Figure 5 is adopted to populate research approaches which are governed by research philosophies.

As per the selection by philosophical positioning, this research takes social constructionism stance. Since this research resides mainly with in positivist territory experiment and survey strategies are incompatible with this research. Ontological assumption of strong 'pre-existing reality' in experiments, require high extend of control

over the environment by which investigator directly, precisely and systematically manipulates the reality (Yin, 2003). This can only occur in laboratory conditions and a pure experimental design cannot manipulate behaviour in real life context. Further the undertaken research entails fieldwork, as such experiment disqualifies from being a suitable research approach. In contrast, survey doesn't require high control over the environment. A survey can be readily designed to enumerate the 'what' type of exploratory questions and they can be easily applied in social science research. The major limitation of survey strategy is that it's hard to explain an observed pattern and it fails in adequately answering a 'why' type of question (Easterby-Smith et al., 2002). This research requires an in-depth analysis on leadership practices, with the combination of 'what' and 'why' type of questions in addressing cultural and behavioural challenges. Hence, experiment and survey approaches are inappropriate for this study.

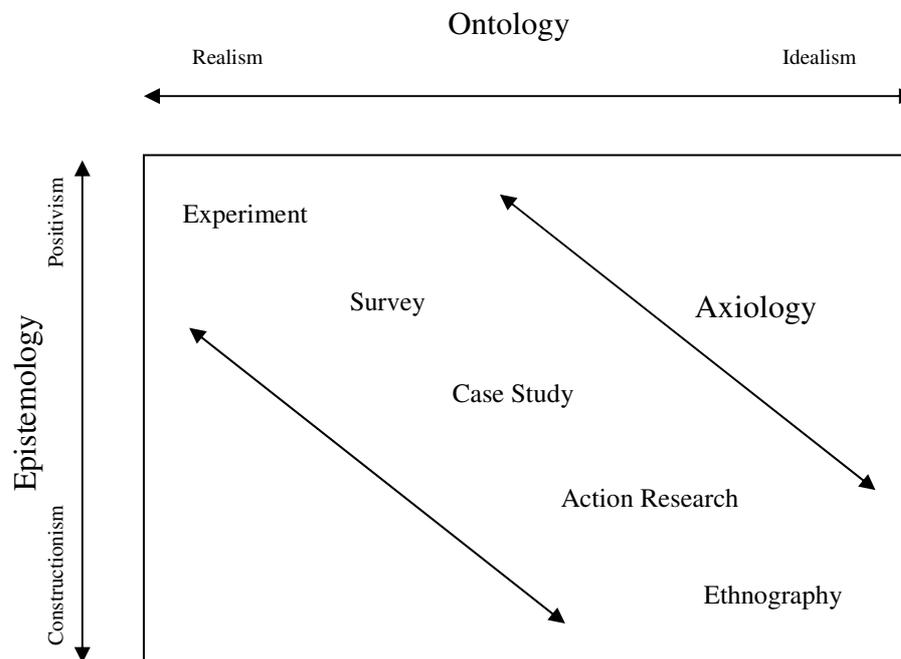


Figure 5: Continuum of research approaches
 Source: Adapted from Sexton, 2004

This leaves case study, action research and ethnography strategies as suitable approaches, in which case study is been selected as the most suitable research approach for this research. In action research the researcher tries to solve the problem by being a part within the problem environment with the goal to change the status quo of the participants (Waser and Johns, 2003). This participative, partly controlled approach, concerns with the process of enquiry to form a cycle of planning, acting, observing and reflecting (Heller, 2004; Collis & Hussey, 2003). Conditions such as, partly controlled, participative observation and intervention disqualify action research from being the appropriate research approach. Similarly ethnography is defined as a study of people in fields to capture the social meaning, involving the researcher participating directly in the setting, if not also the activities to collect data in a systematic manner (Brewer, 2004). Even though ethnography does not operate in partly controlled environments, still it requires very high participative observation of the researcher.

In contrast, case study is defined as an empirical inquiry that investigates a contemporary phenomenon within real life context, especially when boundaries between

phenomenon and context are not clearly evident (Yin, 2003). It covers both 'what' type of exploratory questions and 'why' type of explanatory questions. In this research both 'grand tour' questions and 'sub questions' are combinations of exploratory and explanatory nature about contemporary set of events, which is supported by case study methodology. Further the requirement to analyse leadership practices in real life context to address the cultural and behavioural challenges without controlling actual behavioural events clearly justifies the selection of case study as the appropriate research approach. Thereby, following section further examines into case study approach in defining the appropriate case study design.

6.2.1 Case Study Design

As discussed in section 5, the study questions require the 'first case study stage' of finding major cultural and behavioural challenges and current range of leadership practices. The solutions to the 'first grand tour question' will then stage the second phase of case study which is a theory building attempt by responding to 'second grand tour question'. This will lead towards the theory modification approach in the third stage of this case study design. Third stage will mainly concentrate on proposing the roles and responsibilities of leadership to address the cultural and behavioural challenges in construction partnering projects.

Case study designs are categorised into four types according to 2X2 matrix concerned with choice between single or multiple units of analysis and holistic or embedded design situations (Yin, 2003). Selection of multiple case studies strengthens the foundation for the usage of replication logic by adding multiple sources of evidence and support the function of theory building and theory modification. As such, multiple case study approach is selected with minimum possible cases to satisfy the time constrains of this research. Possibilities of further supplementary cases will be examined after the first stage of the research, which will provide the proper understanding of the nature and required time scales for the defined unit of analysis.

The aim of the research is to identify appropriate leadership practices to address the cultural and behavioural challenges in construction partnering projects. The core analysis of this research is focused on cultural and behavioural challenges and the ways and means of addressing such challenges. This defines the 'unit of analysis' as 'cultural and behavioural challenge' cutting across various organisations which are contributing parties to 'partnering charter'. In this regard, 'cultural and behavioural challenge' will be selected as the main unit of analysis, which may occur between different parties in the same project as well as in different projects. This requires the selection of embedded multiple case designs. Research will try to apply literal replication logic for the analytic generalisation. This is due to exploratory and explanatory needs with theory building attempt of this research. Therefore theoretical replication where cases are chosen to predict contrasting results is impossible.

Also the concern over lack of rigor and biasness in case study methodology requires greater validity and reliability. Yin (2003) proposes four design tests to overcome this criticism; construct validity, internal validity, external validity and reliability. Use of replication logic in multiple case studies satisfies the test of external validity, which deals with generalising study findings in the appropriate domain. The intended deployment of other design tests is discussed in the following section together with research techniques which are energised by the selection of appropriate research approach, case study.

6.3 Research Techniques

Research techniques include both data collection and data analysis, which belongs to the inner ring of nested research methodology. Data collection and analysis are developed together in an iterative process in a case study (Hartley, 2004). This section depicts these two issues with reference to case study approach adopted in this research.

6.3.1 Data Collection

Intended data collection techniques depict the ways and means to fulfil the ‘aims and objectives’ of this study by carefully addressing the research questions as defined in section 5.1. According to Yin (2003), evidence for case studies may come from six sources: documents, archival records, interviews, direct observation, participant observation and physical artefacts.

For the ‘grand tour question one’, data collection techniques such as documents, archival reports, interviews and direct observations can be used on relevant parties in construction partnering projects. In this context, cultural and behavioural challenges of every project participants will be collected together with the root causes of the challenges and the associated leadership practices. For the above mentioned objectives, ‘survey technique’ is considered as main source of case study information in gathering data. While the questionnaires are used to identify cultural and behavioural challenges, ‘open ended interviews’ will be preferred over other interview techniques in exploring leadership practices associated with the root causes. To assist this process a case study protocol techniques will be used in collecting relevant rich data for the analysis. To address ‘grand tour question two’ ‘focused interviews’ will be more appropriate as they are to corroborate certain facts, formed through the analysis. This will take place at the second stage where theory building will be the major aim of the research.

Further, Yin (2003) proposes three principles of data collection to maximise benefits from the evidence. They are; multiple source of evidence, creation of case study database and maintenance of chain of evidence. These concepts will be used to address construct validity and reliability design tests. Construct validity concerns with establishing correct operational measures. This research intends to use triangulation by multiple source of evidence, maintenance of chain of evidence and review of draft case study report by key informants which are considered as appropriate tactics in addressing construct validity (Yin 2003). Further the principle of case study protocol and developing case study database will be employed to address reliability design test.

6.3.2 Data Analysis

Data analysis consists of examining, categorising, tabulating, testing or otherwise recombining both quantitative and qualitative evidence to address the initial propositions of a study (Yin, 2003). In this research, to define the general analytic strategy, ‘relying on theoretical proposition’ is preferred over setting up a framework based on rival explanations and developing case descriptions (ibid, p111). Due to the explanatory nature, ‘explanation building analytic technique’ is more suitable for this research. However the potential problems with this technique will be reduced by the usage of case study protocol, case study database, and the following of a chain of evidence. This will improve the internal validity of the research (Yin, 2003).

In addressing the ‘grand tour question one’, sub question one, quantitative technique of factor analysis or mean score analysis would be used. Documents review, interviews and

usage of repertory grids can also be utilised to assist the quantitative analysis to identify the cultural and behavioural challenges and its root causes. These relevant data collected in the first phase would be analysed with content analysis, cognitive mapping and field force analysis techniques. By this process appropriate theory building will be carried out which will be modified in the next phase. Third phase will utilise group method analysis and theory building techniques to propose the roles and responsibilities of leadership to address the cultural and behavioural challenges in construction partnering projects.

7 CONCLUSION

Methodology provides sense of vision in fulfilling research objectives and it interplays between researcher and data (Strauss and Corbin, 1996). This paper discusses available research philosophies and approaches, while highlighting the appropriate methodology for the undertaken research. Epistemological undertakings and ontological assumptions of the research outlines the appropriate philosophical stance and further it guides towards the selection of research approach and research technique. This paper justifies the social constructionism stance and case study approach for the leadership study as the response to address complex relationships challenges of behaviour and culture in construction partnering projects.

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