Client and consultant engagement in public sector IS projects

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Abstract

Engagement between clients and consultants has been identified as important in public sector IT projects. However, current literature is not clear what constitutes engagement, and how this is related to other concepts such as cooperation and collaboration. This study proposes a model of engagement based on a range of related extant literature. Five case studies of IT projects in the public sector in the UK are analysed in order to empirically validate and extend the proposed model. The validated model suggests that engagement can be understood as three conditions (environment, participants, expertise) and three behaviours (sharing, sense-making and adapting) that dynamically interact in self-reinforcing cycles. The model represents a starting point for academics interested in the future development of a theory of engagement and is of value to practising managers and consultants in either a diagnostic or prescriptive mode to increase the effectiveness of their joint IT endeavours.

Key words: engagement, consultants, IT projects, public sector, UK

1 Introduction

> *"A critical element of consulting projects is therefore engagement - both of the people who work in the organisation that hires the consultants (the client) and among the consultants themselves." Comptroller & Auditor General (NAO, 2006a)*

IS projects are important to the public sector since they are a key means of implementing government policy and represent a major area of expenditure (Horrocks, 2009). This results in public projects in all countries being under intense scrutiny and failure of such projects being highly publicised (House of Commons, 2003-4 2005-06, 2008-09) (Craig, 2005; Craig, 2008; Craig & Brooks, 2006). One frequently adopted approach to delivering public sector IS projects is the use of external consultants (Bronte-Stewart, 2005; House of Commons, 2003-4 ; Lupson & Partington, 2005; Parliamentary Office of Science & Technology, 2003). Due to the importance of such projects, there continues to be much interest, both by practising managers and by academics, in the role of consultants in public sector IT projects (Czerniawska, 2002; Czerniawska, 2006b; Czerniawska & May; NAO, 2006c; OECD, 2001; OGC, 2002a, 2002b, 2003a, 2003b, 2007, 2008; Roodhooft & Van den Abbeele, 2006; Stumpf & Longman, 2000; Yu, Shen, Kelly, & Hunter, 2005).

The term engagement is frequently used in both the academic and practice literature to describe how organisations and their consultants should work together (Block, 2000; Czerniawska, 2006b; NAO, 2006a, 2006b). However, despite the frequent use of this term, it is not clear what engagement consists of and how it can be realised in an IS project.

The aim of this study is to address this gap in knowledge by drawing on relevant extant literature to develop a conceptual model of engagement. This model is then validated by

means of five empirical case studies of IT projects in the public sector. In particular, the research sought to determine if the conditions and behaviours that afford engagement could be identified in practice, and how these conditions and behaviours interact to allow engagement.

The paper begins with a review of the literature on engagement and related concepts. This is used to propose a conceptual model of engagement (Figure 1). The methodology adopted for the empirical stage of this work is then described. Due to the richness of the findings produced by the study, only one of the five case studies undertaken is presented in detail. A final section discusses the significance of the study for both theory and practice, its limitations and implications for future research.

2 Literature Review

2.1 Engagement

Engagement is often conflated with other phenomena such as involvement, participation, commitment and collaboration. Table 1 sets out how this study positions engagement in relation to these other concepts. The later rows of the table suggest an increase in the depth and significance of the relationships between the parties involved in the project or other shared activity.

Considering the first row of Table 1, whilst the term user participation in an IT project may span a wide range of levels of involvement, it is often used to describe activities that are primarily led by members of the IT function, such as eliciting user requirements and system testing, but which require some participation from system users. User participation in IS projects has been widely studied (e.g. Barki and Hartwick, 1989; Butler and Fitzgerald, 2001; Smythe, 2007; Aubert et al, 2008) with the overall recommendation that increased user participation contributes to satisfaction and usage of IT systems.

Involvement is considered to arise when users are given responsibility, which includes leadership and accountability, for IS projects (Barki and Hartwick, 1994a). Consistent with the notion of increased significance of involvement, user involvement was found to be more important that user participation in explaining system use.

Handley et al (2007) differentiate between participation and engagement, by describing the latter as involving both *'hearts and minds'*. That is, they view engagement as going beyond fulfilment of the activities required, to expending both emotional and rational energy and expertise. Similarly, the community of practice literature views engagement as an activity that involves aspects of community building, social energy and, as participants learn and develop, engagement includes emergent knowledgeability (Wenger, 1998) as well. Other elements that have been identified as contributing to engagement include interest, professionalism, building confidence between the individuals involved, relevant prior experience, expectations and physical presences (Czerniawska, 2006c; Bower and Degler, 1999).

The terms commitment and engagement are used interchangeably, particularly in practitioner literature. For example, the UK National Audit Office developed a framework for developing commitment between clients and consultants, which included recommendations

to improve engagement, suggesting these terms were being viewed as synonymous (NAO, 2006a). We follow the work of McCormick (1999) who viewed commitment as the outcome of engagement, and found from an empirical study of large-scale projects, that increased engagement led to increased commitment.

Collaboration describes organisations working closely together and is related to cooperation (Huxham, 1993b). The NAO examined how experienced practitioners achieved significant improvements in the successful delivery of projects by developing collaborative relationships, concluding "*strong collaborative relationships go hand in hand with good project performance"* (NAO, 2006d: 5). Whilst this suggests that the NAO equates collaboration with engagement, theories of collaboration focus on cooperative relationships between partner organisations that have complementary goals and not between consultants and clients (Huxham, 1993; (Lacity & Willcocks, 2000). Public sector organisations require their consultants to share the client's goals for the IT project. There is this overlap between the concepts of collaboration and engagement, but they are considered as distinct activities in this study.

Table 1: Phenomena related to engagement

Increasing depth and significance of relationship	**Description**	**Extant Studies**
Participation ↓	Increased user participation contributes to satisfaction and usage	(Aubert, Barki, Patry, & Roy, 2008; Butler & Fitzgerald, 2001; Smythe, 2007)
Involvement ↓	Responsibility causes a move beyond participation to involvement	(Barki & Hartwick, 1994)
Engagement or Collaboration/ Cooperation	Engagement involves both 'hearts and minds'- it goes beyond fulfilment of the activities required, to expending both emotional and rational energy and expertise. Client-consultant organisations with shared goals. Partner organisations working together with complementary goals.	(Czerniawska, 2006b) (Bowers & Degler, 1999) (Handley, et al., 2007); (Wenger, 1998) (Huxham, 1993a; Kanter, 1994) Lacity and Willcocks, 2000
Commitment ↓	Empirical study showed increased engagement in projects resulted in increased commitment	(McCormick, 1999)

Other phenomena that are relevant to the consideration of individuals working together on joint endeavours are trust and social capital. Block (2000) identifies trust as an element of the affective side of the client-consultant relationship (Block, 2000: 14). Czerniawska (2006a) agrees that trust is fundamental to consulting, and Wenger lists it as a characteristic of complex mutual relationships (Wenger, 1998). The concept of social capital has been used to understand a wide range of social phenomena. The root of the concept lies in the idea that people can access things of value because they have entered into relationships with others (Adler & Kwon, 2002; Bourdieu, 1986; Putnam, 1993). Nahapiet & Ghoshal (1998) propose

a model of the components of social capital that shows how these components interact to produce intellectual capital.

Whilst the concepts of trust and social capital are both valuable in understanding relationships where the participants have had sufficient interaction to develop them, they are not helpful in situations where the participants must come together without prior experience of each other. In many projects, members represent different specialties "*with little time to coproduce communal knowledge*" (Lindkvist, 2005: 1200) who need to co-evolve, share and exchange their existing intellectual capital. This research therefore seeks to propose a model that reflects how diverse project members can develop sufficient trusting relationships to co-evolve, share and exchange knowledge such that it can be considered that engagement has been achieved.

2.2 Proposed Model of Engagement

Our model of engagement focuses on two kinds of phenomena: (a) the conditions from which relationships emerge and (b) the behaviours that may result. It is posited that certain conditions will influence the behaviours of the participants, allowing them to undertake what could be described as engaged behaviour. We therefore examined extant literature to conceptualise in more detail the conditions for engagement and behaviours of engagement. Each of the constructs included in the proposed model is discussed in turn below.

2.3 Conditions for Engagement

Three conditions that extant literature suggests afford engaged behaviours were identified as environment, participants and expertise.

2.3.1 Environment

Environment is the physical or virtual context in which people interact. Nonaka et al described Ba (equivalent to "place" in English) as a shared space for emerging relationships, which can be a physical, virtual or mental space (Nonaka & Konno, 1998). Sturdy et al suggested that consultants and clients could cross or blur boundaries by meeting in other than at routine places and times, in liminal spaces, spaces where institutionalised or cultural rules, norms and routines are suspended (Sturdy, Schwarz, & Spicer, 2006). Orlikowski (2006: 465) suggests that "*the materiality of infrastructures, spaces and technological artifacts structure human agency (and thus knowledgeability)*" thus extending the idea of environment to include other material objects. Objects that are shared and sharable across different key parties are boundary objects (Bechky, 2003; Carlile, 2002; Star & Griesemer, 1989), such as project goals (Lindkvist, 2005) and can help solve problems.

2.3.2 Participants

Marcum (1999) identifies the range of participants as an essential component of communication and a driver for engagement. Creating communities provides networks between participants and hence an appropriable organization. Such communities also help to widen the circle of participation and hence provide access to a wider range of expertise (Block, 2000).

2.3.3 Expertise

Expertise comes with people who have expert skills, interpersonal skills, information or experience to share (Axelrod, Axelrod, Beedon, & Jacobs, 2004). To engage in an IT project,

a participant must have expertise or knowledge and be prepared and able to contribute it. Knowledge, intertwined with power, can be owned and exercised by both parties in a client-consultant relationship (Pozzebon & Pinsonneault, 2012)and thus engaged behaviour requires sharing expertise in both directions in such a relationship.

2.4 Behaviours for Engagement

Three conceptual categories for describing behaviours of engagement were identified from the literature: sharing, sense making and adapting.

2.4.1 Sharing

Sharing tasks between participants can sustain relationships, provided it delivers mutual value to participants (Wenger, 1998). Cropanzano et al (2005) observe that increased sharing of tasks, facilities, experiences, language and mutual commitments results in a sense of mutuality or independence. Mutual engagement or cooperative interaction that members of communities undertake together has been shown to help learning for those directly involved in the shared activity and also by related others (Orlikowski, 2002; Wenger & Snyder, 2000).

2.4.2 Sense making

When sense making occurs, members of and across communities get clear understandings of each other and how issues are seen. Negotiation of meaning helps make sense of each other's experiences and allows the co-construction of shared knowledge (Lave & Wenger, 1991). The diverse experiences that draw people to a project mean groups may not have shared representations, interpretations and systems of meaning when the project starts, so meaning must be negotiated in order to get those shared understandings (Lave & Wenger, 1991).

2.4.3 Adapting

Adapting describes the volition to align effort, and to combine information or experience, to produce revised goals, plans and actions (Klein, 2009). Adapting allows change through new learning, knowledge and new experience as people gain new expertise through their relationships with each other, with socialization helping the transfer process (Nonaka, Toyama, & Konno, 2000; Orlikowski, 2002). The combination of expertise means that participants can adapt to the evolving complexities of a situation and the people that they work with. Material objects can also be adapted to the needs of stakeholders (Star & Griesemer, 1989).

The conditions and behaviours discussed above can be combined to produce the initial or provisional conceptual model shown in Figure 1.

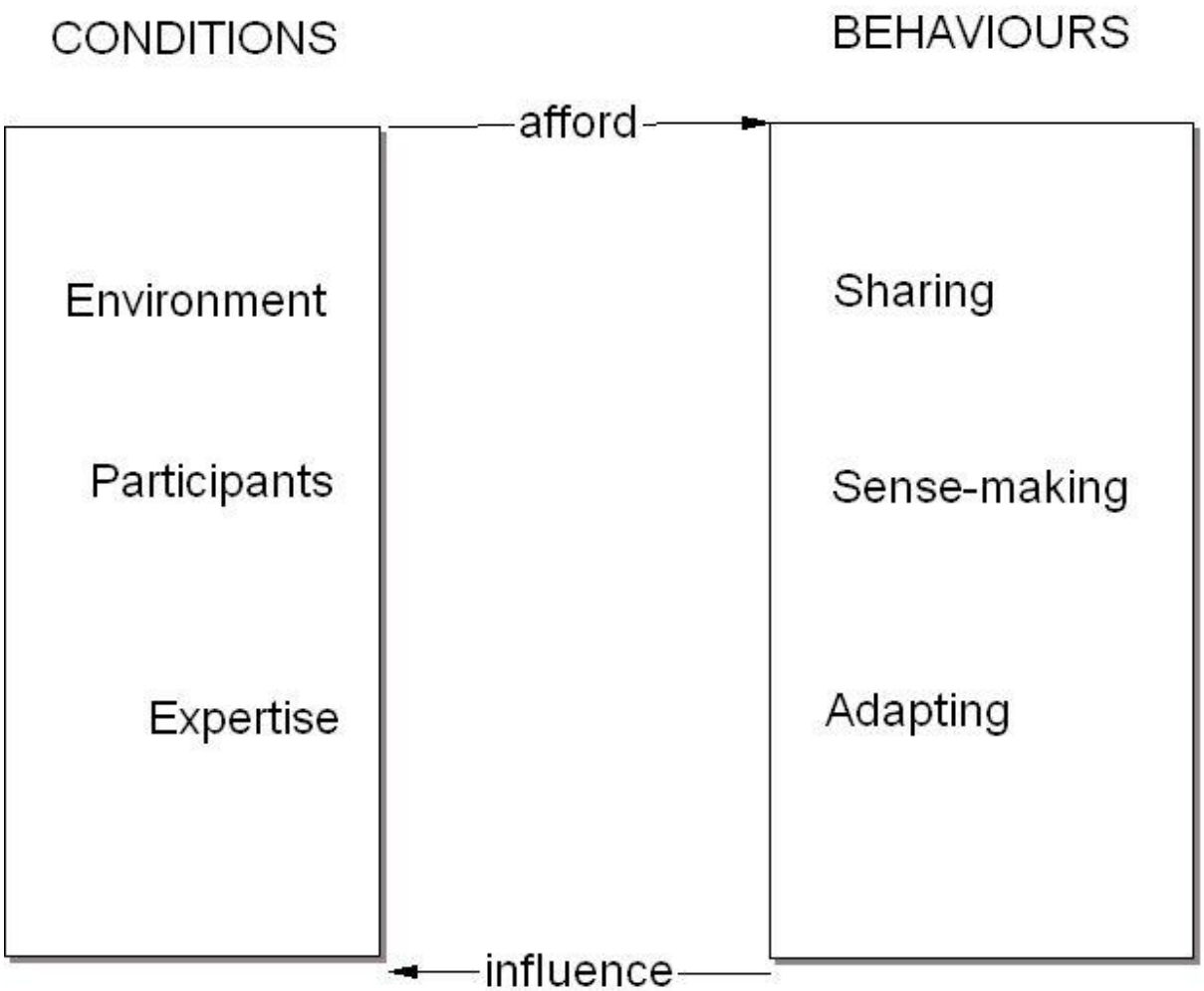

Figure 1: Initial Conceptual Model of Engagement

3 Research Methodology

Recognizing the context dependent and complex nature of the components of engagement identified in the conceptual model, an interpretivist case study approach was adopted for the study (Eisenhardt, 1989; Hoskisson, Hitt, Wan, & Yiu, 1999). Such an approach also respects the understanding and experience of the consultants and clients that participated in the study, by allowing them to tell their own narratives or '*epilogues'* (Dibbern, Winkler, & Heinzl, 2008: 343) rather than ascribing meaning to, and via, predetermined scales and quantitative patterns inherent in many quantitative approaches.

3.1 Sampling and Data Collection

A multiple case study approach was adopted in order to increase the analytical generalisation of the study findings (Yin, 2008). To provide consistency between cases, a convenience sampling strategy (Miles & Huberman, 1994) was adopted in which all case studies were based on IT projects in the UK public sector. However, to provide analytical generalisation, there was variation in public sector organisations included and the nature, size and duration of the projects studied, as shown in Table 2.

Five case studies were undertaken, which allowed a balance between data overload and the analytical generalisation sought by the study. The appropriateness of five cases was

demonstrated by *'saturation'* and *'sufficient regularities'* being achieved during data analysis (Miles & Huberman, 1994: 62). Twenty-eight interviews were carried out with multiple staff involved in each of the case study organisations including in four of the cases both clients and consultants. In case C, it was not possible to speak to the consultant and hence interviews were undertaken only with client staff.

Table 2: Features of the case studies

Case	A	B	C	D	E
Sector	Island government	Island government	Local government	Central government	Non-departmental public body
Requirements	IT strategy	Systems development	Appraisal of IT options	Systems development	Systems analysis
Programme or project	Programme	Project	Project	Programme	Project
Budget	Unknown	£450,000	£27,000	Unknown budget, but the programme was worth £30,000,000	£30,000
Number of people involved	Up to sixty in the IS department, at least one consultant, six or more contractors	Four or more users, plus unknown number of contractors, plus at least two consultants	Three clients plus the consultant's informants	Up to forty suppliers plus contractors plus client staff	Five clients plus the consultant's informants
External professionals	Consultants, contractors	Consultants, contractors	One consultant	Suppliers, contractors	One consultant
Number of interviews	7	5	4	7	6
Interviewees	CEO, e-services manager, programme manager (contractor), consultancy CEO, technical expert (contractor), PM, BSM	Consultancy PM, user, CSM, director, BSM	Director, user, support, manager	Account director (from supplier), engagement lead (from supplier), category manager, IT delivery director, projects lead, IT user director, commercial manager	ISD head, procurement manager, consultant, architecture manager, PM, user

Interviews were guided by a semi-structured interview schedule that was based on the model shown in Figure 1. Other sources of data such as internal documentary data (internal project

briefs, implementation progress reports, internal memos), site observations and field notes were collected (Denzin & Lincoln, 1998). Interviews were also undertaken with industry experts to provide a greater understanding of the context of IS consultancy projects.

3.2 Data Analysis

The interviews were recorded, fully transcribed and the transcripts were coded using the software package QSR NVivo (Crowley, Harre, & Tagg, 2002).

Analysis started as soon as data was obtained, and then continued iteratively as cases were written (Richardson, 2005). Template coding of the data was undertaken (King, 2004; Waring & Wainwright, 2008). The initial coding template was based upon the interview guide, which in turn was based on the proposed model. As analysis progressed, the coding template was developed and refined to reflect the data collected. Hence, consistent with the concept of template coding, data analysis combined both deductive (from the model) and inductive (from the data) codes. Data that related to more than one element in the template were coded to both elements and were also identified as linking data (Dey, 1993). It was expected that such data would provide insight into how the elements interact.

Use of the software package allowed a piece of coded text to be easily related back to its context in the full interview transcript, which is important to ensure that meanings are not lost or distorted. In order to address coding bias and increase the internal validity of the study, coding was undertaken by one of the researchers and then assessed by the other two researchers involved. Where differences of opinion and interpretation occurred, these were discussed and resolved by looking at the text in its fuller context. Whilst the limitations of coding, such as inter-coder reliability were recognised, the approach allowed the considerable amount of data generated to be reduced and structured in a consistent manner (Bryman & Bell, 2003).

4 Findings

In order to demonstrate the empirical validation of the proposed model we report in detail on one of the five case studies, case D. This case is particularly rich in that it comprised two stages: an initial stage, where the project appeared to be failing and a subsequent stage, where the actions of key players in the project changed the interaction between the client and IT supplier and the project was finally judged as highly successful by those involved. We consider in turn each element of engagement shown in the proposed model (Figure 1) for this case. We also consider in turn the interactions between those elements that the case demonstrates and these are summarised in Figures 2 and 3.

Case D: A Shared Business Service

Case D was a £30 million project to develop an IT-based shared business service (SBS) for a central government department in the UK. On completion, the SBS would be used by 24,000 government department internal users for finance, human resources and procurement.

Two IT suppliers were involved in the project. For this case study, the researcher had access only to supplier X, a provider of IT systems, services and products in the UK, employing over 10,000 people. The supplier had had a long-term contract over several years to provide hardware and technical support to the government department involved in case D. This

contract was due for renewal in 2009, a few weeks before the researcher had access to interview data.

In the first phase of the case, there was little engagement between the client and supplier X and the project was described by interviewees as a *'let and forget'* long term contract that could be commonly found in UK central government. By mid-2008, the relationship between the client and supplier had got to a low point, with the client perceiving the supplier as slow to respond to requests and even technically incompetent. The situation was exacerbated by personnel changes in the supplier, with a number of supplier account directors having come and gone in quick succession. This was described by the new account director from the supplier:

> *"I'd found a team from [Supplier X] perspective that were eight years into a ten year contract, that had sagged into a shape."*

At this time, a new group commercial director with responsibility for IT projects was appointed by the government department, and became the senior responsible officer for this project. He challenged supplier X to turn the situation around and offered as a reward the opportunity for supplier X to become a strategic partner to the department and increase in business. Without such a turnaround, the supplier realised that their long-term contract would be put out to tender to other consultancies.

The approaches adopted by the new senior staff in the client and supplier appear to have changed the quality of engagement between the two organisations. The final project was successfully completed, leading the client to make considerable savings in IT costs and the supplier was awarded a renewed contract. The project was nominated for a national public sector IT award.

4.1 Conditions for Engagement

4.1.1 Environment

The environment dimension describes the context in which the client and supplier undertake the project and includes the physical working environment, electronic support, the time available, and physical and virtual boundary objects.

The majority of the supplier and client staff on the SBS project was co-located in open-plan offices in a modern building occupied by the government department. This allowed informal contact, which the interviewees in the case stressed as important. The need for informal personal interaction was a lesson that one interviewee described he had learned painfully. He recounted an incident in which he had had an opportunity for an informal one-to-one discussion with one of the supplier people, but had turned it down because he wanted to bring along a colleague. When they met in a formal situation, the supplier side brought three people and "*positions were drawn*" for a somewhat frosty encounter.

In most system development projects, the user requirements can act as an important boundary object that expresses the client's requirements to the supplier. These requirements can then be translated into a plan for the project. In case D, rather than develop a single, shared plan, initially both the client and the supplier had developed their own plans:

"In June of last year, there wasn't a single plan. We've got our own plan and they've got their plan. Well, I thought that's not going to work, is it, how do you know when you're going to deliver something together" [supplier - engagement lead]

Shortly after the challenge by the new client group commercial director, the supplier appointed a new account director for the project. One of the first things that he did was to make a presentation to both client and supplier staff on the project, which set out the common values and behaviours that he would expect to see from both parties. The presentation effectively acted as a shared boundary object between the parties, filling the gap that had existed due to the lack of shared requirements and plans. After twelve months he updated this presentation to show those involved how much had been achieved. Most colleagues were surprised at how much progress had been achieved and felt much more positive.

Explicitly considering the interactions between the environment element and other elements in the proposed model shown in Figure 1, in the first phase of the project, the lack of a single plan and the restrictions placed on sharing of the client and supplier plans limited the sharing of objectives, milestones and other project details (interaction 1 in Figure 2). In the second phase of the project, the development of a joint plan allowed the client and supplier to share and agree objectives, milestones and ways of working together (interaction 1 in Figure 3).

4.1.2 Participants

Due to the size of the government department involved, there was a large number and range of types of participants on the client side of the project. The client included both a central IS department and the final customer department, which represented the 24,000 users.

The difference between the existence of participants and the actual behaviour of participation was demonstrated by the IT user director. He admitted to using some meetings with the supplier to catch up with his emails on his Blackberry. Observation by the researcher of such a meeting revealed that user staff from the client tended to '*dither'* about their requirements. Staff from the client also commented during interviews that during the first phase of the project there had been *'too much going on'*. They recognised this was an endemic hazard in the public sector and attributed it to new political initiatives being launched before earlier ones were completed. They were also honest that there was not a culture of performing and delivering within the department.

Considering the interactions between participants and other elements of the proposed model, in the first phase of the project, there was limited interaction between the client and staff, leading to limited sharing of ideas or documents (interaction 2 in Figure 2). In the second phase of the project when new senior personnel were appointed by both sides, increased emphasis was placed on informal interactions between staff from both parties, which lead to both more formal sharing, such as of the project plan, and informal information exchanges that helped ensure that the project progressed smoothly (interaction 2 in Figure 3). For example, one of the interviewees from the client commented on how he was due to meet a member of staff from the client to make progress on a project matter:

"I'm just going to meet somebody for a coffee now to talk about a business process change. Rather than email him I'm going to talk to him about (it), and once I've sounded him out I'll send him an email" [category manager]

4.1.3 Expertise

Interviewees were clear and consistent that it was most important for the supplier to demonstrate technical expertise, since they were, in most cases, brought in to provide technical skills that the government department does not have and does not need in the long term:

> *"They bring value in a way that they have core competencies that we don't have. They have all the disciplines and the professionals who run that particular service that we need" [IT-delivery director]*

However, they also recognised that technical expertise needed to be complemented with other expertise such as project management and leadership skills:

> *On the ground, it's about application expertise, what the product can do and what it can't do. At a higher level it's about managing the programme and delivering on time [supplier – engagement lead]*

In this case, this complementary expertise described by interviewees included the use of techniques that were thought to be particularly pertinent to consultancy:

> *I brought in an approach, which I think is a real consultant's approach, which is about listening to your clients. Rather than telling the client what they should do [supplier – engagement lead]*

They also included the possession of knowledge and understanding of the client context by the supplier:

> *"Because of [the account director]'s understanding of the public sector, he knows then how to manage his organization, get the best from them in the delivery of service to us." [IT delivery director]*

In this case, expertise appears to interact particularly with the behaviour of sense making (interaction 3 in Figure 2 and Figure 3). Although a frequent perception is that the core of the *"consultancy contract is the transfer of expertise from the consultant to the client"* (Block, 2000: 27), sense making requires the application of expertise from both the client and the consultant. In phase 1 of the project, the lack of interaction from the supplier limited their input of expertise. In the case of the client, they did not have the expertise to know how much information they should share with the supplier to allow them to make sense of the client's needs.

4.2 Behaviours for Engagement

4.2.1 Sharing

Problems of sharing existed before the change of senior management occurred. Both senior management and project staff in the client organization felt that they were not getting the necessary responses, inputs, and behaviours from the senior team at the supplier. The client senior management started an internal blog within the client project team in order to capture views on and examples of the performance of the supplier. The resultant feedback about the supplier's quality of service was excoriating; not only was the supplier service bad, but there

were complaints about secrecy and lack of sharing. One of the key criticisms was the lack of shared project plans.

Even being co-located did not create trust because the different approaches and cultures within the two organisations hindered sharing. For example, an interviewee from the supplier described how decisions by the client required agreement by multiple tiers of managers:

> *"The commercial manager […] reports up the business via a number of further managers making progress very slow in that every change is tediously negotiated taking weeks to agree which forces us [the supplier] to work at risk and when this is highlighted, we are seen as then being unhelpful" [Email from supplier engagement lead]*

When the new senior personnel were appointed at both the client and the supplier, both of these individuals placed great emphasis on informal interactions between staff as a means of building understanding and trust and using this as a basis for future sharing. When the new client group commercial director was appointed, the supplier engagement lead invited him to lunch, noting how they were similar ages and had similar backgrounds and so both felt that they had things in common which would help them work together. Once these personal relationships had begun, the supplier and client teams met together to develop a single shared plan. It was recognised that the two organisations still had differences in their intent and ways of working. However, as described by one interviewee, colleagues could accept a competitive or even slightly adversarial arrangement provided those interactions were open and shared:

> *"We are much better placed and I understand where I fit in this and it's not a cosy relationship and it should be full of the right competitive tensions but they should be done in such a way that are helpful" [category manager]*

In this case sharing was influenced by both environment and the participants in the project. As will be discussed below, sharing also seems to strongly interact with sense making (interaction 4 in Figure 2 and Figure 3).

4.2.2 Sense Making

Sense making involves members of and across communities getting an understanding of each other and negotiating meaning together. In the first phase of the project, in addition to the lack of a shared plan and the difficulties that this gave rise to in developing a shared understanding of the major elements of the project, there were issues relating to the lack of clarity in project requirements. As described by the supplier engagement lead:

> *"The [Government Department] wouldn't, couldn't articulate what they wanted us to do…. it became difficult, because whatever we guessed was what they wanted, they'd say that's not what we want" [supplier – engagement lead]*

To get round this problem of non-articulation, supplier and government department had to create networks for sharing, and build structures that facilitated cooperation, to communicate problems and sort them out. The new group commercial director and account director brought people together to thrash out requirements. It transpired that one of the issues was that the government department had a number of different people, mainly contractors, who had different points of view, with no single aligned view of what they wanted to do.

Achieving successful outcomes required formal discussion, but also off-the-record discussions. When both parties knew what they needed to achieve they could "*sit down and talk*" to find out what was *"key for each of you and aligning that"* [IT delivery director].

As mentioned above, sense making appears to rely on sharing of ideas and information between participants that is enabled by elements of the environment (interaction 4 in Figure 2 and Figure 3). For example, the department blog provided a forum to share discussion between client staff. This sharing of experiences allowed the client to make sense of the performance of the supplier and confirmed their dissatisfaction with the IT supplier's service.

4.2.3 Adapting

In the first phase of the case, both the client and supplier showed limited willingness to adapt their behaviours. In the second phase, the increased willingness to discuss issues and share plans and ideas led to increased adaptation. One example is provided by the approach to revising the agreed requirements. As noted by the supplier, in the first phase, the client demonstrated a trend common in the public sector, of wishing to customise an off-the-shelf system:

> *"Where public sector people get particularly bogged down is if they buy a commercial, off the shelf product, which they are supposed to adapt to, and instead they adapt the product to them." [supplier – account director]*

In the second phase of the project, the client adapted to the supplier's suggestion of '*a philosophy of no more change'.* However, the supplier also demonstrated an ability to adapt by agreeing to make some very late changes to the system that the client had overlooked but which were judged as critical.

Adapting seems to be a deeper element of engagement that only happens because of sharing and sense making. In the first phase of the project, there was little evidence of adapting. Later, however, adapting behaviour led to parties co-producing knowledge, such as creating one shared project plan between the client and the two suppliers, as shown in connection 6.

A key part of the adaptation in phase 2 of the project was a change in the participants, with the appointment of new senior staff on both the client and supplier side. These individuals were key to changing other elements within the proposed model. In particular, they placed considerable emphasis on developing sharing between staff from both sides, both through formal and informal means. This allowed greater understanding and sense making between the two sides and allowed the two parties to adapt their approach to become effective.

The table in the Appendix provides further data from case D relating to the interactions between the conditions and behaviours in the proposed model.

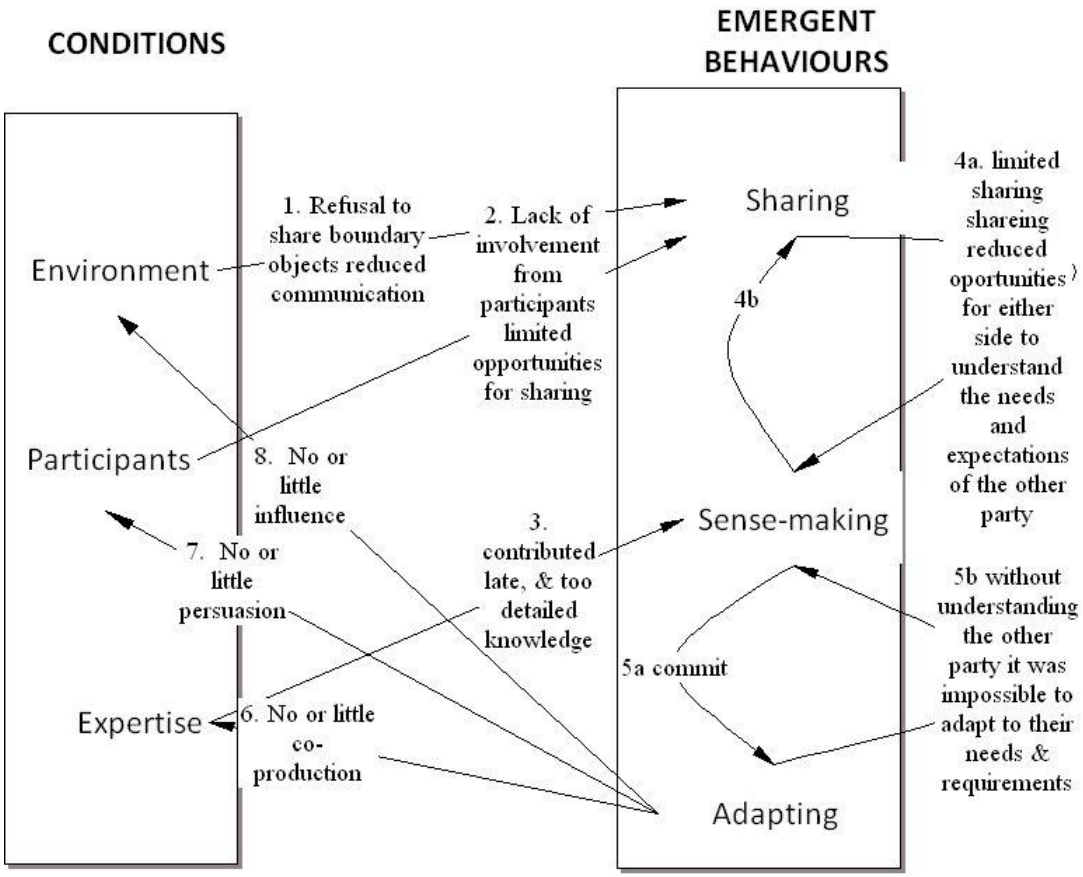

Figure 2: Interactions between conditions and behaviours in first phase of case D

Figure 3 demonstrates work that participants put in to sharing, sense making and adapting during the second phase, in contrast to the first phase scenario in Figure 2. Figure 3 shows new links forming feedback loops between components.

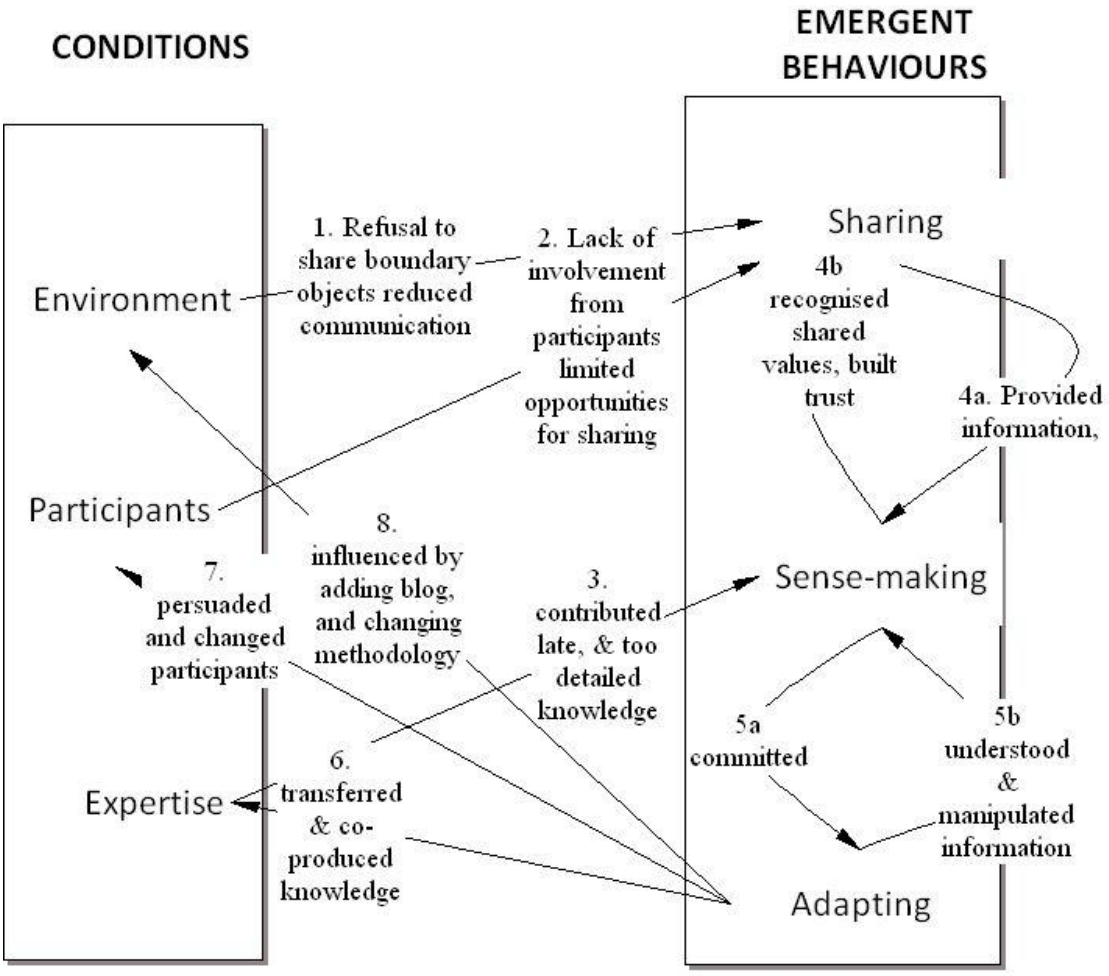

Figure 3: Interactions in the second phase of case D

A similar analysis to that presented for case D was undertaken for the four other cases, including the detailed review of the six elements in the proposed model, an analysis of the interactions between the elements and the production of a diagram of the interactions between elements. These intra-case analyses were combined to produce the model shown in Figure 4. The interactions between elements of the model are summarised in Table 3.

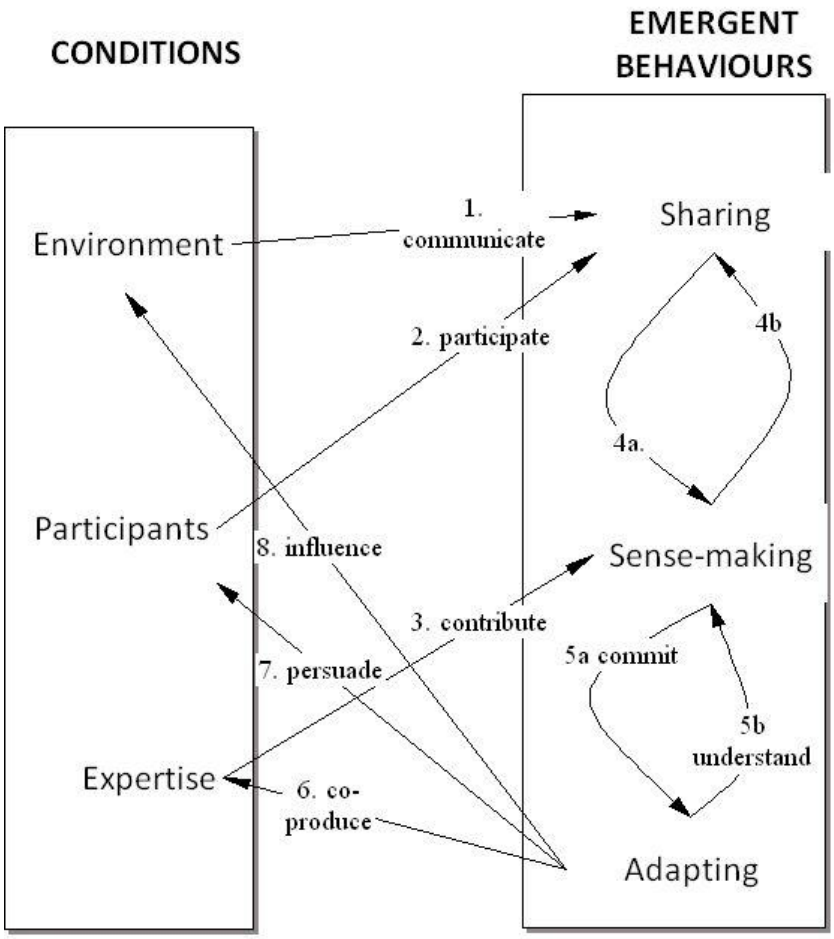

Figure 4: Empirically Grounded Model of Engagement

5 Discussion and Conclusions

The findings of the study provide empirical support for the elements included in the proposed model (Figure 1). Three behaviours have been identified: sharing, sense making and adapting. These behaviours appear to be inter-related and iterative, that is sharing dialogue and boundary objects allows sense making of the project, the context and the objectives and approaches of the others involved in the project. Developing this sense-making appears to allow those involved to adapt their behaviour, and where necessary, the conditions relating to the project. The cases suggested that informal approaches are important for sharing, which is consistent with observations that socialization and shared experience are important for the transfer of tacit knowledge (Nonaka, 1994). Informal approaches are often eschewed in the public sector due to the wish to have the trail of evidence of accountability that is provided by written reports and emails. It would appear that this desire to generate a record of accountability might be hampering the ability to develop the behaviours identified in this study as conducive to engagement.

The role of the conditions identified in the proposed model appears to be to allow participants' sharing, sense making and adapting behaviours to emerge. The environment encourages sharing; participants participate in sharing, and they contribute expertise that helps sense making. If conditions exist, then the behaviours can exist; for example, in case D, the blog allowed client staff to share their views of the supplier performance with each

other and hence make sense of the level of performance that was being provided. Materiality of physical or virtual context in which people work (Orlikowski, 2006) is important in stimulating and supporting the identified behaviours, since it gives participants something to work on, share, and talk about together. This finding supports recent work on how consultants use materials (Skovgaard-Smith, 2009) and on sense making that uses materials (Beers, Boshuizen, Kirschner, & Gijselaers, 2006; Werkman, 2010).

Analysis of the interconnections between the conditions and behaviours across the five case studies shows a number of different patterns. However, there was a consistent notion of the cyclic and self-reinforcing nature of the interaction between the behaviours and conditions studied. That is, appropriate conditions allowed the behaviours identified to develop. Similarly, where appropriate behaviours were demonstrated this, particularly through the behaviour of adapting, led to a change in the environment that was more conducive to the behaviours. We are aware that the five projects studied were all judged as successful by those involved. It is therefore not surprising that the cyclic interaction between conditions and behaviours was a virtuous cycle, with the behaviours leading to conditions that supported further development of sharing, sense making and adapting. The first phase of case D, which was the only part of a case that was not judged as successful, suggests that a similar vicious cycle can set in. In this case, a lack of sharing, particularly of project plans, led to concerns about the suppliers' expertise. However, this case study suggests that a vicious cycle can be reversed.

5.1 Contribution to Theory

The research contributes to understanding the phenomenon of engagement between IS project participants in public sector organisations, and addresses a gap in the literature. In reviewing the extant literature to develop the conceptual model, we discussed how engagement relates to, but is distinct from similar notions such as participation and involvement. The main contribution of the study is an empirically supported model of engagement that has been derived from and integrates extant work from fields such as knowledge (Orlikowski, 2002; Wenger, 2000) and prior studies of consultancy (Bloomfield & Danieli, 1995; Skovgaard-Smith, 2009). The model suggests that engagement appears to be a dynamic and continual process with self-reinforcing cycles and is a starting point for the future development of a theory of engagement.

5.2 Implications for Practice

Versions of the model and its logic were shared with practising managers as it was being developed and refined. These managers, some of whom were from the case study organisations and some of whom were not involved in the data collection, reported that from their own experiences they could recognise the elements of the model and the proposed interactions, supporting the external validity of the study findings (Eisenhardt, 1989).

The model could be used by practising managers and consultants in both diagnostic and prescriptive modes. If a project appears to be facing problems due to limited engagement, then the model could be used to identify gaps in either the behaviours of those involved or the conditions of the project. Similarly, at the start of a project, the model could be used in a prescriptive mode to suggest the elements that both the consultant and the client should ensure have been considered.

5.3 Limitations and Implications for Future Research

A limitation of this research concerns the context of the case studies and the inclusion of a degree of convenience in the sampling strategy. Access to the cases was obtained via clients of projects where the clients were pleased with and proud of the process and outcome. In that sense, this biased sample of case studies shows only what happens in relatively successful projects. Our claims that the conditions shape engaged behaviours need to be tested in a wider set of project contexts.

The context of this research is IT-based projects but non-IT based business change projects also use consultants who provide technical and management consulting. Many such projects would benefit from engaged relationships. The model developed here may be of relevance to this wider set of projects.

Since the case studies were all drawn from public sector organisations, this research could be extended to replicate the study in other contexts to confirm the adequacy of the model and investigate further the interactions between the behaviours and conditions.

Appendix

Table 1 summarises the data from the case relating to the interactions between the conditions and behaviours in the proposed model.

Table 3: Summary of evidence

Interaction	Evidence of the nature of the interaction		
	Phase 1	**Phase 2**	**Comment**
1.Environment and sharing	"there are times when we've had to take it to other people to make a decision on things ..what hinders it is there is just so much going on. So there are lots of these things coming through" [IT-DD] "the purpose of a plan is to let everyone in the project know what's going on so it cannot be restricted unless everyone who is a stakeholder in the project is allowed to see a restricted document. That's ridiculous. A project manager needs .. it on a wall and puts it behind the project manager's desk and it's what they live by. You won't see those anywhere; people think, .. can't have that on the wall, that's going to show .. far too much...they wouldn't share their plan with us." [IT user director]	"Attendance at the monthly programme steering board where we provided product insight and programme experience around Oracle. This was welcomed and encouraged by the [government dept] and a high level of trust was built up over the course of the programme" [supplier document] "to get that understanding of each other you have to have face-to-face conversations, really." [s-EL]	
2 Participants and sharing	"if you don't speak to both sides at the same time then you can change the behaviour on your side but as soon as the behaviour is not switched to the other side, it soon goes back. So that's been one of the major challenges." [IT user director] "Whereas before perhaps, you know, there would always be the two lines a bit like trench warfare, you go there and they'd go there being shot over and it would be like no one would win, we were as	"Some of the more helpful conversations that we have are the corridor type conversations where we meet up in the corridor and we say, just be aware of business bubbling up, you might want to nip this in the bud," [IT-DD] "I visit customers, [Account Director name] visits customers, we get to view different types and we then exchange or share information" [IT-	

Interaction	Evidence of the nature of the interaction		
	Phase 1	**Phase 2**	**Comment**
	bad as they were" [category manager]	DD]	
3. Expertise and sense-making	"Client gets requirements, client writes big requirements doc, throws it over the wall at the suppliers, suppliers develop software, supplier goes back and shows, business users go, not what I want" [S-AD]	"it's only through the work we did with SBS, and [account director] coming up with, you know, let's listen to our client, and that's my background listening to the client, and getting our team to listen to the client" [s-EL] "you learn that some of the challenges that they face aren't that different." [IT DD] "an appeal to the seniors, based on hard facts" [s-AD]	"a lot of clients don't understand the difference between indicative and formal price." comment made at an observed meeting between supplier & the IS client with reference to the user base.
4. Sharing and sense-making	"sometimes you can read one word one way and somebody else can read it another." [IT-DD]	"what we brought to the table was a letter that said, ... unless… have a very good reason to change this product, where is the business case for changing, for changing the product, otherwise why can't you adapt to it? And it was that sort of philosophy we brought to it of not changing the product any more." "some of the challenges that they face aren't that different. The only real difference is that they're motivated obviously by shareholders and a big profit okay but some of the other values that they have are absolutely the same as our own" [IT-DD]	There was otherwise little evidence of interaction between environmental conditions and sense-making behaviour unless something was shared first.
5. Sense-making and adapting		"[supplier] I think, learns from us is that we do not work in a command and control types, we are a very consensual, feathery organisation and I think that working in this type of environment	

Interaction	Evidence of the nature of the interaction		
	Phase 1	**Phase 2**	**Comment**
		is very different and he is able to then match one to the other" [IT-DD]	
6. Adapting and expertise	"it had got to a point where they didn't... pushed from pillar to post by various people, not joining up on our side, and, you know, you give up after a while – I'll just do what I'm told." [IT user director]	"We are encouraged anew to phone [systems integrator supplier] and report issues rather than suffer them in smouldering apathy." [anonymous blog post]	
7. Adapting and participants		"They had a change of personnel, in fact their CEO changed as well but also our account director was changed." [IT category manager] "The thing that [account director name] can do is [account director name] can say to us, "we can give you this, which is a Rolls Royce and that will cost you this much pounds. But I know given your current situation, economic climate, you don't need this kind of thing, which is more a Skoda type thing, but will give you what you want"." [IT DD] "we changed a lot of the teams on both sides and they stopped throwing things over the wall to each other, they stopped sending... And it's changing the culture and the attitudes of teams. Once we had changed the top level and we'd agreed something sensible" [IT user director]	1. Participants changed 2. The new participant adapting to the situation persuaded the client participants to share & rethink their requirements.
8. Adapting and environment	"over the last 12 months or so, maybe a little bit longer, 18 months, relationship with [Supplier] at a senior level was quite poor, the senior team didn't feel that they were getting the necessary responses	"I took the view with [Group Commercial Director] that if we had tried to negotiate with [Supplier], whether it would come to a good deal and that required a great deal of change of	Problems of adapting existed in first phase

Interaction	Evidence of the nature of the interaction		
	Phase 1	**Phase 2**	**Comment**
	and inputs and behaviours from the senior team at [Supplier] and that filtered down. There was a lot of adversarial behaviour, whilst I don't necessarily think adversarial behaviour is always wrong but, I think, when it's getting to a point where people are arguing about money it's actually not being productive and it's impacting on the department's ability to deliver its frontline services" [IT category manager]	behaviours about trust... it required relationships and change of behaviour of both sides and we are moving from a current arrangement over to a new arrangement" [category manager]	

6 References

Adler, P. S., & Kwon, S.-W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review, 27*, 17-40.

Aubert, B. A., Barki, H., Patry, M., & Roy, V. (2008). A multi-level, multi-theory perspective of information technology implementation. *Information Systems Journal, 18*, 45-72.

Axelrod, R. H., Axelrod, E., Beedon, J., & Jacobs, C. D. (2004). *You don't have to do it alone: How to involve others to get things done*. San Francisco, CA: Berrett-Koehler.

Barki, H., & Hartwick, J. (1994). Measuring user participation, user involvement, and user attitude. *MIS Quarterly, 18*, 59-82.

Bechky, B. A. (2003). Object lessons: Workplace artifacts as representations of occupational jurisdiction. *American Journal of Sociology, 109*, 720-752.

Beers, P., Boshuizen, H., Kirschner, P., & Gijselaers, W. (2006). Common ground, complex problems and decision making. *Group Decision & Negotiation, 15*, 529-556.

Block, P. (2000). *Flawless consulting: A guide to getting your expertise used* (2 ed.): Jossey-Bass/Fpeiffer.

Bloomfield, B. P., & Danieli, A. (1995). The role of management consultant in the development of information technology: The indissoluble nature of socio-political and technical skills. *Journal of Management Studies, 32*, 23-46.

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258).

Bowers, W. B., & Degler, W. P. (1999). Engaging engagements. *Journal of Management Consulting, 10*, 23.

Bronte-Stewart, M. (2005). Developing a risk estimation model from IT project failure research. *Computing and Information Systems Journal, 9*.

Bryman, A., & Bell, E. (2003). *Business research methods*. Oxford: Oxford University Press.

Butler, T., & Fitzgerald, B. (2001). The relationship between user participation and the management of change surrounding the development of information systems: A European perspective. *Journal of End User Computing, 13*, 1.

Carlile, P. R. (2002). A pragmatic view of knowledge and boundaries: Boundary objects in new product development. *Organization Science, 13*, 442-455.

Craig, D. (2005). *Rip-off! The scandalous inside story of the management consulting money machine*: Original Book Company.

Craig, D. (2008). *Squandered*: Constable.

Craig, D., & Brooks, R. (2006). *Plundering the public sector: How new labour are letting consultants run off with £70 billion of our money*: Constable.

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management, 31*, 874-900.

Crowley, C., Harre, R., & Tagg, C. (2002). Qualitative research and computing: Methodological issues and practices in using QSR NVivo and NUD^*IST. *International journal of social research methodology, 5*, 193-198.

Czerniawska, F. (2002). *The intelligent client: Managing your management consultant*: Hodder & Stoughton.

Czerniawska, F. (2006a). Are we placing too much faith in trust? *Consulting to Management - C2M, 17*, 3-4.

Czerniawska, F. (2006b). Ensuring sustainable value from consultants. In *MCA*: Management Consultancy Association.

Czerniawska, F., & May, P. (2006). *Management consulting in practice: Awarding-winning international case studies*. London: Kogan Page.

Denzin, N. K., & Lincoln, Y. S. (1998). *Collecting and interpreting qualitative materials*. Thousand Oaks, CA; London: Sage.
Dey, I. (1993). *Qualitative data analysis: A user-friendly guide for social scientists*. London: Routledge.
Dibbern, J., Winkler, J., & Heinzl, A. (2008). Explaining variations in client extra costs between software projects offshored to india. *MIS Quarterly, 32*, 333-366.
Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review, 14*, 532-550.
Handley, K., Clark, T., Fincham, R., & Sturdy, A. (2007). Researching situated learning. *Management Learning, 38*, 173-191.
Horrocks, I. (2009). 'Experts' and e-government. *Information, Communication & Society, 12*, 110-127.
Hoskisson, R. E., Hitt, M. A., Wan, W. P., & Yiu, D. (1999). Theory and research in strategic management: Swings of a pendulum. *Journal of Management, 25*, 417-456.
House of Commons. (2003-4). Inland revenue: Tax credits fourteenth report of session 2003–04 together with formal minutes, oral and written evidence In Public Accounts Committee (Ed.). London: The Stationery Office.
House of Commons. (2005-06). Achieving value for money in the delivery of public services In Public Accounts Committee (Ed.), (Vol. 17). London: The Stationery Office Limited.
House of Commons. (2008-09). Central government's management of service contracts. In Public Accounts Committee (Ed.), (Vol. 17). London: HMSO.
Huxham, C. (1993a). Collaborative capability: An intraorganizational perspective on collaborative advantage. *Public Money & Management, 13*, 21-28.
Huxham, C. (1993b). Pursuing collaborative advantage. *Journal of the Operational Research Society, 44*, 599-611.
Kanter, R. M. (1994). Collaborative advantage: The art of alliances. *Harvard Business Review, 72*, 96.
King, N. (2004). Using templates in the thematic analysis of text. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 256-270). London: Sage.
Klein, G. A. (2009). *Streetlights and shadows : Searching for the keys to adaptive decision making*. Cambridge, MA: MIT Press.
Lacity, M., & Willcocks, L. P. (2000). Relationships in IT outsourcing: A stakeholder perspective. In R. Zmud (Ed.), *Framing the domains of IT management: Protecting the future ... ... Through the past*. Cincinnati, Ohio: Pinnaflex Educational Resources.
Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
Lindkvist, L. (2005). Knowledge communities and knowledge collectivities: A typology of knowledge work in groups. *Journal of Management Studies, 42*, 1189-1210.
Lupson, J., & Partington, D. (2005). Accountability for public sector IT projects and the senior responsible owner: A theoretical background and research agenda. In (Vol. 2009).
Marcum, J. W. (1999). Out with motivation, in with engagement. *National Productivity Review, 18*, 43-46.
McCormick, M. T. (1999). *The impact of large-scale participative interventions on participants.* Temple University, Philadelphia.
Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis : An expanded sourcebook* (2nd ed.). Thousand Oaks: Sage Publications.

Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review, 23*, 242-266.
NAO. (2006a). Central government's use of consultants. In *HC 128 | Session 2006-2007 | 15 December 2006*. London: HMSO.
NAO. (2006b). Central government's use of consultants: Building client and consultant commitment. In (Vol. Supporting paper 1). London: HMSO.
NAO. (2006c). Central government's use of consultants: Methodology. In (Vol. Supporting paper 3). London: HMSO.
NAO. (2006d). Good governance: Measuring success through collaborative working relationships. In. London: HMSO.
Nonaka, I., & Konno, N. (1998). The concept of "Ba": Building a foundation for knowledge creation *California Management Review, 40*, 40-54.
Nonaka, I., Toyama, R., & Konno, N. (2000). SECI, Ba and leadership: A unified model of dynamic knowledge creation. *Long Range Planning, 33*, 5-34.
OECD. (2001). Management of large public IT projects: Case studies. In *22nd annual meeting of senior budget officials*. Paris.
OGC. (2002a). Common causes of project failure. In. London: Office of Government Commerce.
OGC. (2002b). Value for money evaluation in complex projects. In. London.
OGC. (2003a). IT supplier code of best practice In (pp. 12). London: Intellect.
OGC. (2003b). Value for money measurement: OGC business guidance. In. London.
OGC. (2007). Risk and value management: Achieving excellence in construction procurement guide. In.
OGC. (2008). An introduction to public procurement. In. London: TSO.
Orlikowski, W. J. (2002). Knowing in practice: Enacting a collective capability in distributed organizing. *Organization Science, 13*, 249-273.
Orlikowski, W. J. (2006). Material knowing: The scaffolding of human knowledgeability. *European Journal of Information Systems, 15*, 460-466.
Parliamentary Office of Science & Technology. (2003). Government IT projects - analysis of the problem In POST (Ed.).
Pozzebon, M., & Pinsonneault, A. (2012). The dynamics of client-consultant relationships: Exploring the interplay of power and knowledge. *J Inf technol, 27*, 35 - 56.
Putnam. (1993). The prosperous community: Social capital and public life. *American Prospect, 13*, 35-42.
Richardson, L. (2005). Writing: A method of inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (Vol. 1370, pp. 923-949). London: Sage Publications
Roodhooft, F., & Van den Abbeele, A. (2006). Public procurement of consulting services. *International Journal of Public Sector Management, 19*, 490-512.
Skovgaard-Smith, I. (2009). Challenge as an outsider - know as an insider: Client experiences of collaboration with consultants. In A. F. Buono & F. Poulfelt (Eds.), *Client-consultant collaboration: Coping with complexity and change* (Vol. Research in management consulting, pp. 143-178): Copenhagen business school.
Smythe, J. (2007). *The CEO chief engagement officer: Turning hierarchy upside down to drive performance*: Gower.
Star, S. L., & Griesemer, J. R. (1989). Institutional ecology, 'translations' and boundary objects: Amateurs and professionals in berkeley's museum of vertebrate zoology, 1907-39. *Social Studies of Science (Sage), 19*, 387-420.
Stumpf, S. A., & Longman, R. A. (2000). The ultimate consultant: Building long-term, exceptional value client relationships. *Career Development International, 5*, 124-134.

Sturdy, A., Schwarz, M., & Spicer, A. (2006). Guess who's coming to dinner? Structures and uses of liminality in strategic management consultancy. *Human Relations, 59,* 929-960.

Waring, T., & Wainwright, D. (2008). Issues and challenges in the use of template analysis: Two comparative case studies from the field. *Electronic Journal of Business Research Methods,* Available from http://www.ejbrm.com/ [Last accessed April 2012]

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.

Wenger, E. (2000). Communities of practice and social learning systems. *Organization, 7,* 225.

Wenger, E. C., & Snyder, W. M. (2000). Communities of practice: The organizational frontier. *Harvard Business Review, 78,* 139-145.

Werkman, R. (2010). Reinventing organization development: How a sensemaking perspective can enrich OD theories and interventions. *Journal of Change Management, 10,* 421-438.

Yin, R. K. (2008). *Case study research: Design and methods (applied social research methods)* (4th ed.). Thousand Oaks, Calif.: Sage Publications.

Yu, A., T. W. , Shen, Q., Kelly, J., & Hunter, K. (2005). Application of value management in project briefing. *Facilities, 23,* 330-342.