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Abstract
Social capital as a focus for organizational maintenance and development due to the mechanistic focus of organizational activity is emerging as an area of increasing interest. The research broadens this focus to the realm of system development. In this interpretation social capital is defined as the relationships that make the organization work effectively. It is the mechanisms of relationship networks, reciprocity, trust and social norms.

We examine through the lens of a recent implementation of an innovative and current real-world UK Government project how social capital borne from the inherent culture influenced the behaviour of key players effecting project delays. We draw upon research experiences to provide evidential insights from the empirical setting. The aim is to increase understanding from which lessons can be drawn so that validated conclusions can inform the IS domain.

Keywords: IS Development, Social Capital, Case Study.

Introduction

The original perception and interpretation of social capital has been through a societal and civic lens. A recent survey by the Office for National Statistics (ONS 2001) states that within the social science domain there is some consensus that it is the role of networks and civic norms that are emphasized in defining social capital. While definitions of social capital vary key authors have discussed social capital in terms of social energy, community spirit, civic virtue, trust, shared values, relationships, neighbourliness and social glue depending on the theoretical and conceptual perspective applied (Coleman 1988, 1990, Healy 2001, Passey 2000, Putnam 1995). These authors credit Bourdieu with the origin of the term social capital in its contemporary usage, however it is most commonly associated with Putnam (1995, 2000) who perceives it as a community characteristic (ONS 2001).

We adopt the interpretation of social capital defined by Cohen and Prusak (2002) as the relationships that make the organization work effectively. More specifically we acknowledge it as the mechanisms of relationship networks, reciprocity, trust and social norms (Coleman 1988, Portes 1998). Social capital in this context encompasses both human capital in terms of individual knowledge, skills, competences and attributes (Côté 2001), and cultural concerns relating to the inherent nature of the organization. Côté further states '*the inherited culture of a given society* (here the case study organization) *heavily influences the acquisition and use of these skills and knowledge'* (p30). This is evidentially true of the case study context.

From a bureaucratic viewpoint social capital is part of the fabric of organizational life. Cohen and Prusak (2002) and Putnam (1995) suggest that within bureaucratic arenas low levels of investment in social capital bind stakeholders to individualistic working cultures that undermine collaborative working practices, and hinder the generation of trust that are critical to IS development success. Through the lens of a recent implementation of an innovative and current real-world UK Government IS project this paper explores such as situation. We examine how the organizations social capital borne from its inherent culture impacted upon system development. We further discuss how organizational protocols and traditions influenced the attitudes and behaviour of key players effecting actual project delays. Thus this paper proposes to increase the understanding of the difficulties of human interaction in the cultural and contextual situations of a bureaucratic arena. Findings suggest a lesson identified is the need for cultural acclimatization of both the environment and of key stakeholders. Additionally we emphasize that where organizational protocols supplant investment in relationships and trust this presents an area of risk that has implications for practice.

This paper is organized as follows: section 2 sets out the research approach and theoretical setting, section 3 describes the background to, and the context of the case study setting. Section 4 presents the case study analysis. It explores how social capital influenced the behaviour and attitudes of key participants. Issues of trust and conflict are discussed and findings presented. Finally section 5 puts forward conclusions drawn from the empirical data.

Theoretical Lens and Research Approach

The research utilized an interpretive approach within a case study setting involving an ethnographic method of qualitative data collection that was considered suitable to both the research theme and the IS domain (Beynon-Davies 1997, Harvey and Myers 1995, Loftland and Loftland 1984, Myers 1997, 1999, Strauss and Corbin 1990, Walsham 1995, 1997, Yin 1993, 2003). The inductive approach used enabled the researcher to collect data from primary and secondary sources that would subsequently develop or contribute to theory as a result of data analysis. The Model of 7 Principles for Interpretative Field Research that are pertinent to case studies and ethnographies put forward by Klein and Myers (1999) was specifically applied in the follow manner: [1] Human understanding was achieved through iterative enquiry of both the 'parts' and the whole in terms of individuals and the environment, [2] context involved the critical reflection of the case study specific social and historical backgrounds, [3] sustained interaction occurred between researcher and subjects during the research study, [4] the theoretical framework is concerned with generalizations of an ecological nature that specifically relates to the extent to which conclusions and lessons learnt drawn from this research study are significant to comparable social contexts, [5] dialogical reasoning was applied through the recognition of possible contradictions and preconceptions and subjected to subsequent cycles of revision. [6] The ethnographic approach examined multiple interpretations and influences borne from the social contexts and participant behaviour. [7] Finally data gathered were examined in terms of social and political interests of the stakeholders to acknowledge socially created biases and distortions from participants.

The case study consisted of longitudinal research over three years situated within the project environment that included 9 months sustained fieldwork. The ethnographic approach was complemented by 126, 1:1 informal semi-structured interviews that were conducted, audio-taped and respondent validated for added rigour and to offset unintentional observer bias (Alvesson and Deetz 2000, Patton 1990). Interviews were recurrent throughout the project in an iterative process that is associated with grounded theory (Glaser and Strauss 1967, Strauss and Corbin 1990). Secondary research involved an in-depth and systematic analysis of literature, project documentation and artefacts. The real-life context, experiences and commentary from participants is used to increase validity and provide meaningful insight.

A case study database (NVivo) was used to store and manage the empirical data for a more rigorous and fluid research process than manual methods provide (Myers 1999, Yin 2003). Data analysis concerned ‘open coding’ where data were organized into meaningful themes. Subsequent categorization, through axial coding, established and how the categories might inter-relate and link into sub-categories (Orlikowski 1993). Data was differentiated such that it facilitated both factual and heuristic searching. Access to the project environment and all participants of the project community was granted by the Senior Management Board of the IS development project. The researcher was effectively a ‘fly on the wall’, an outside observer, no action research was involved.

Case Study Background and Context

The case study concerns a UK Regional Government Department (the case study organization) that is responsible for managing the administration and expenditure of the EC’s Common Agricultural Policy (CAP) schemes through a number of grants and subsidies that are dynamic in nature. Scheme management is the responsibility of scheme specific Process and Scheme Managers (referred to as Business Managers). It is these Business Managers, identified as key stakeholders, who attend to the business needs and administration of the schemes respectively under EC guidance and control.

The legacy system had a history of late payments, poor customer satisfaction and an increasing inability to meet the EC’s changing requirements such that the development of a new system was rationalized. The New IS System moves away from the previous individual scheme processing towards a Generic Process Model that represents an integrated solution through redesigned and standardised processes across the different schemes.

The project structure consisted of a Senior Management Board and teams of project workers with a pre-defined reporting structure. Development teams evolved according to development needs that reflected the relevant business and development skills/knowledge. The project community refers to the core team of 50+ reflecting the developers and organizational people, scheme related business people and members of the Project Board. The Project is described as both large and complex. There was an initial cost estimate of £10m+, a projected timeframe of 2-3 years, a core project team of 50+, and a customer base that is measured in terms of 100,000s of grant and subsidy applications per annum across the region. The project went into overrun and is still on-going.

Organizational Culture

The case study organization conforms to bureaucratic traditions as defined by Carnell (2003), Hofstede (2003), Morgan (1986), Wallach (1983) and Weber (1964). Characteristically it is hierarchy driven, highly procedural and risk averse, operating in a regulated, control oriented milieu and a perceived blame culture. Work processes are supported by clear management lines of responsibility and authority. Culturally people are accustomed to precise patterns of working. This involves a high degree of job specialization operating on a ‘one person, one job’ basis. Therefore business knowledge and expertise are inherently owned discretely and knowledge remains domain specific.

Development Approach

Development was out-sourced to a commercial company who imported their specific in-house Agile development approach - Iterative Application Development (IAD). Agile approaches reflect incremental and adaptive development. It is characterised by short, time-boxed iterative and evolutionary development cycles that emphasize high levels of user involvement (Highsmith and Cockburn 2001, McConnell 1996). This was to provide a controlled, structured but flexible development environment that was appropriate for the continually changing business requirements. A co-operative and collaborative working arena was anticipated. Consequently the case study project development was broken into development modules that involved process definitions relevant to the development stages of the Generic Process Model. The project environment remained within a central location where both the project participants of the organization and developers were co-located on the same site for the duration of the project.

Case Study Analysis

As discussed earlier we draw a parallel between a societal interpretation of social capital and an industry application from an organizational stance, where organizations invest in the social capital of their environments and their employees. Social capital in this context encompasses both human and cultural issues. Social capital is a part of the fabric of organizational life. It is the relationships that make the organization work effectively (Cohen and Prusak 2002). Social structures are prevalent in business environments where communities evolve as subsets of organizational culture (Beynon-Davies 2002, Hofstede 2003). We examine how the social capital of the case study organization, borne from its inherent culture, affected the outcome of the system being developed through the interaction and behaviour of the key participants.

The purpose of this section is two fold, firstly to discuss the influence that the social capital of the research case study had upon the key participants and their interaction within the development environment, and secondly to explore in greater depth issues of trust that had a significant impact upon the project arena. Analysis is supported by project commentary to substantiate greater validity of findings.

Social Capital and Key Participants

Schuller (2001) reminds us '*that individuals and their human capital are not discrete entities that exist independently from the rest of the organization* (p20). He states that behaviour stems from how individuals have accumulated and developed their knowledge, skills and the relationships that exist within the parameters of the organization's nature in which they are required to work. Although referring to an economic perspective we believe a parallel can be drawn in context of this case study. The inherent organizational protocols played a significant role in the accepted working patterns and behaviour of key stakeholders. The premise is that the social capital of the case study organization bound key stakeholders to specific working cultures that undermined successful outcome of the project.

We argue that within this bureaucratic arena investment in social capital is represented by, and embedded in organizational processes, procedures and work patterns. Domain specific knowledge and working practices of one person one job created norms and values that engendered a perceived level of legitimate power. This influenced key stakeholder behaviour. Evidence illustrates how Business Managers maintained a high degree of control in meetings; they were able to govern the decision-making processes. They would withdraw from meetings with a view to rescheduling at a later date. This caused considerable delay and affected delivery schedules. Here we recognize how the inherent the norms and values, borne from the social nature of the development arena, impeded the development project.

A further example of the impact of social capital was the difficulty that Business Managers had adopting a team culture. Reaching consensus on the prioritization of development schedules proved challenging. Again the behaviour of key stakeholders was exigent. They adhered to inherent discrete and individual working practices that prevented the creation of a mutually reciprocal working ethos. In reality they were a group of individuals adhering to their own agendas borne from the intrinsic nature of former working patterns. Developer comments support this, '*... actually what happened was everybody was still saying 'my priority is first, mine's the first', from 5-6 different Business Leaders'* Developer (12); '*When we started to try and get the Business to really prioritize and they couldn't, they just couldn't ...*' Developer (1). Business Managers responded '*I had to promote my business needs so I could do my job'* Business Manager (7). This reflects the organization's social capital where the organizational behaviour emphasizes control over processes and outcome rather than absolute investment in relationships and mutual reciprocity aimed at overcoming these difficulties. Consequently there was no common vision and therefore no team identity, unity or spirit, there was no 'we' and ultimately no trust.

Issues of Trust

Issues of trust were particularly problematic for the development arena. Evidence illustrates that the relationships needed to a build a level of trust between key stakeholders and out-sourced developers suffered from negative characteristics governed by the social capital. Here we refer to Hofstede's views regarding group cultures. Business Managers i.e. as a group of individual and discrete workers, allocated to the new development environment imported their behaviour and customs (i.e. norms and values) with them into the new project environment. Problems were experienced in stepping away from their previous organizational protocols of deferring decision-making up the management hierarchy and moving towards the new culture of fast authoritative decision-making. This is confirmatory of research by Willcocks (1997) that negative attitudes exposed within the new working environment may result from people's experiences and preconceptions formed in previous work settings.

It was the lack of trust that is particularly relevant. Although a degree of relationships and common frames of reference existed it did not generate the trust that binds people together as evidenced by following commentary '*I think it's a shame that there is very little trust between us* [the developers] *and the Business Managers, we are both at fault but they don't trust us to do our jobs to their satisfaction'* Developer (18). Business Managers aware of this commented '*It's created a lot of problems, a lot of unease and a lot of distrust now, will we get what we need for our schemes to meet business and EC objectives ...we're very cynical.* Business Manager (13).

It can be argued that Business Managers were working to their own objectives rather than in the anticipated co-operative manner. This proved to be counter productive to the project arena which eventually deteriorated into an 'us and them' scenario. For example '*We had a lot of difficulties, there was definitely an 'us and them' attitude.* Developer (6); '*There was this divide, it was very 'them and us'* Business Manager (5). The creation of the relevant active connections between Business Managers and developers was limited and thus did not contribute to a mutual understanding, shared values or behaviours nor promote mutual reciprocity. The lack of community spirit and common vision necessary to achieve common goals contributed towards project delays and an unsuccessful project outcome.

Conclusions

This paper has attempted to offer rich and meaningful insight into how social capital from a bureaucratic stance had significant impact upon the outcome of the development project in terms of stakeholder interaction. In this paper we have argued that investment in social capital was defined by organizational protocols that bound key stakeholders to specific working cultures. The inference is that the inherent organizational protocols played a significant role in determining stakeholder's working patterns, behaviour and attitudes that had significant practical implications for the project. Table 1 below summaries how key factors associated with the organizations' inherent social capital impacted upon the development project.

Table 1: Key Factors Impacting Upon Project Success

Social Capital Factors	Impacts Upon Project Development
	• Counter productive to creation of team ethos
Organizational Protocols	• Sustained ownership of business processes
Hierarchical Management	• Perceived level of legitimate power
One person – One Job	• Undermined the reciprocal relationships
Domain Specific Knowledge	• Governed decision-making activities
Discrete Working Culture	• Hindered the creation of trust
Individual Agendas	• Engendered a level of tension and conflict
	• Led to development schedule delays

Findings highlight how working customs and practices had a direct impact on achieving the critical development and delivery schedules. It is noteworthy to recognize how the social nature of the development arena was impeded by the norms and values of the inherent social capital. This paper documents the importance of recognizing that where bureaucratic protocols drive social capital this has implications for practice. A lesson here is to recognize that there is a need for cultural acclimatization of both the environment and key stakeholders. Additionally where organizational protocols supplant investment in relationships and trust this presents an area of risk that needs to be acknowledged and managed.

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