CASE STUDY REPORT ON A PROJECT MANAGEMENT APPROACH TOWARDS TRANSFERRING IS OWNERSHIP

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Abstract

This case study paper is about the changes made and the actions that were taken to mitigate a perceived likelihood of IT system rejection on a large IT project three months prior to delivery and handover, after encountering difficulties which included business disengagement, requirements ambiguities, problems of multiple software applications integration, and uncertainty over delivery and acceptance.

Based on the analysis of the semi-structured interviews, documentation data and observation, the provisional analysis is reported upon in this paper. Our findings demonstrate that the changed project management approach was underpinned with the objective of transferring IS ownership, this being achieved through the depoliticalization of the business process, using user led workshops. In this on-going research, we begin to realise that ownership is a major factor in gaining user acceptance of the system.

Keywords: IS Ownership, System Acceptance, Depoliticalization

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1. Introduction

Shifting the perspective of system development from producing a technical product to the social or business activities (Lyytinen, 1988; Walsham, 1993) means changing the emphasis to recognizing and managing 'the existence of multiple, conflicting perspectives' (Easterbrook, 1994). However, alignment of different perspectives consequentially entails reorganisation of power and control over decisions made during the development lifecycle which begs the question of the IS ownership. Requirements ambiguities that include problems of stakeholder disagreement and user dissatisfaction can only be truly said to be resolved when the owner takes responsibility for the actions and consequences. This is reflected in the IS literature in that the lack of IS project ownership has been recognized as one of key factors for a project failure (Hornby et al., 1992; Schultze and Boland Jr, 2000). However, the concept of ownership is ambiguous and has led to a series of research questions about what it is, and who has ownership of it. Further questions emerge when questioning the nature and mechanism by which ownership is operationalized. This paper reports upon a case study about a changed

project management approach which was developed through a practice led initiative by a software company that was forced to recognise a lack of user ownership three months prior to the handover; this held implications of system rejection, further development costs and possible contract termination.

This paper examines firstly the issues surrounding the IS project ownership in IS literature by analysing and tabularizing the previous research works. This is followed by outlining the research method together with a case study background. Thirdly, we report the changed project management approaches and practices and in the conclusion, we discuss our next research stage.

2. IS Ownership Literature at Work

Mumford's seminal work pointed out that the user participation leads to IS ownership and effective and successful system development (Mumford, 1979). The discussion of user participation in IS has long been recognised as one of the key success factors and has gained momentum in recent years (Ives and Olson, 1984; Doherty and King, 1998b; Kyng, 1991; Beath and Orlikowski, 1994; Lynch and Gregor, 2004; Pan, 2005; Rondeau et al., 2006). The literature argues that having user participation can improve system quality through validation of the system both technically and organizationally (Franz and Robey, 1984) which helps to diffuse a resistance (Hirschheim and Newman, 1991) and leads to a greater user satisfaction (Amoako-Gyampah and White, 1993; Bultler, 2003). Through the analysis of the IS literature on project ownership, we have identified 'lack of user involvement', 'changes in management' and 'lack of senior management ownership' as ownership issues and have identified and grouped the suggested resolutions with the relevant ownership issues (Table 1). However, there has been a lack of empirical data to examine the workings of these proposed resolutions.

IS Ownership Issues	Literature References		Proposed Resolutions	Literature References
Lack of user involvement	Schultze and Boland Jr, 2000; Pan, 2005; Doherty et al., 2006		Increasing user participation through prototyping	Beynon-Davies et al., 1999
			Increasing user participation through JAD of	Duggan and Thachenkary, 2003

			communication	
			Focus group of experts	Public Accounts Committee, 2007
			Agile	Hanssen and Faegri, 2006
			Balancing the needs of end-users' and central-users' needs	Sillince and Mouakket, 1997
Changes in management	McBride, 1997; Keil and Robey, 1999		Creating perceived collective ownership	Sawyer, 1997
			Creating perceived collective ownership using XP	Paulk, 2001
			Assigning clear responsibility	Harwell, 1993
Lack of senior management ownership	POST, 2003; McBride, 2005; The National Audit Office, 2006		Increasing participation of business management using JAD	Brown and Ross, 1996
			Championing by senior management	Kalisperas, 2003

Table 1. IS literature on ownership issues with proposed resolutions

3. Research Method

Drawing on the literature about case study research and qualitative methods (Trauth, 2001; Yin, 2003) and in utilizing case study as a means to develop and refine concepts (Cavaye, 1996), we built our research strategy within the IS research tradition (Avison, 1997).

The data collection focused upon the actions of the Business Analysts (BA), as they were the key subset group of stakeholders who were responsible for introducing and implementing a changed project management approach and were accountable for all communications between the system development project team, the users and the management. In total, thirty five in-depth interviews were conducted and each session lasted approximately 30-120 minutes. Together with the document collection, selected

segments from the interviews were verbatim transcribed preparing patterns to emerge with thematic analysis (Lofland and Lofland 1995). This assisted us to develop plausible' descriptions (Prasad, 1997) and a subsequent categorisation. Additionally, there were post implementation follow up telephone interviews to confirm outcomes.

4. Case Study Background

From conception, the project was driven by a structured waterfall development approach using PRINCE2. Six months before the deadline, a large part of the system had been developed and some of the test plans were formulated. However, the senior project management team became aware that problems were emerging, sensing that the users were uninterested and disengaged from the project. As a result, a new project manager and a team of six BAs were employed to identify these user problems and carry out remedial action. Subsequently, the new BA's memo returned with a list of problems which became a devastating critique of the project's situation. However, it provided rationale for change; they identified:

- Lack of engagement from business management
- Problematic organizational restructuring
- Unclear requirements
- Annual deadline accounting procedure
- High level of staff turnover with contractor based work force
- Geographical separation of the teams
- Unexpected loss of a key knowledge worker
- High level of innovation
- Technological and data constraints e.g. archived content in various formats
- Difficulty in integrating different off-the-shelf software packages

5. Depoliticalization of IT Process

The new project manager had inherited difficulties which were framed by predetermined political and technological constraints. The existing project approach was considered to have alienated the users and created a gap between the project team and the users. The belief was that the shift of focus from technology to a business perspective was needed to create a user led environment in which the users could develop a feeling of ownership towards the system.

Fundamental changes in project management approach and practices were introduced. These included a change from relying on documentations and ad-hoc meetings to regularly holding workshops with users focusing upon verbal and pictorial communication, consequently increasing the profile, presence and engagement of the users in the process of the system development.

One of the main BAs roles was to facilitate the user led workshops and translate any technical language to business, and vice versa, making a clear distinction from the traditional way of acting as analysts. In the workshops, users were encouraged to engage with the system development by identifying and defining their own working processes and to further win their confidence, the project manager adopted a pragmatic approach by using a heavily adapted state modelling approach rather than a detailed requirement documentation of the process flow. The focus of each modelling session examined and reflected the micro interactions with that particular set of user or process owners. This subtle emphasis facilitated the users to feel that they were in charge as they directed the state of the content at each stage of the process through the production chain. This was documented and prompted by the BAs who would locate and map it as a state to be further clarified and confirmed in a later workshop. In essence, the workshops focused upon the states at various point in the system and initiated conversations about what should happen next, hence the effort of the workshops evolved around discussions on 'what the system should do' rather than 'how the system should operate'. Each state was identified as a goal towards the business objectives as explained by one of BAs (Text box 1).

…by emphasizing the state you give anybody reading it absolute mental freedom; with the conceptual freedom of adding any mode of delivery to it such as, what state it needs to achieve. It does not describe how you supposed to do it and pretty much you can apply anything to try to meet that object, that state.

Text box 1. Focusing on state

This change of emphasis meant that the users were able to perceive the system as an aid to their work and they could relate the process of the system with that of their own, thus helping the users to engage with the system development, as one of BAs explains (Text box 2).

State model is being used in business to talk about things learnt in the state model language, that is, by most of the senior management who are involved. These guys are talking the language. They are really engaged.

Text box 2. Promoting engagement using modified state modelling

For the users, this militated against the issues of having to deal with the implications of changes in working practice in the business organization. From the IT perspective, it meant that designers did not have to become embroiled in tacit dimensions but that they could focus upon the system's interaction and functionality. It depoliticalized the effect that the system had upon organization by shifting the perspective from 'how' to 'what', through which users were able to encapsulate and project the business actions onto the design of the system as explained by one of the BAs (Text box 3).

State model only included the right level of detail, avoided contentious issues around the actions and the actual processes that were being achieved.

Text box 3. Levelling of details

The changed project management approach was considered to have achieved its aim of re-instigating users' interests and transferring IS ownership as shown in the interview data (Text box 4).

We are starting to (have) one heart in mind. It is a slow process. So far, everybody comes over for the user acceptance (session) where we demonstrate system's processes to them, and have them walked through their working scenarios, we often won them over, they are positive.

Text box 4.The effect of changing project management approach

6. Conclusion

This working paper focused upon the problem of ownership for system acceptance. Information system development co-exists within the context of organisational and environmental change; very rarely do the original circumstances as originally conceived exist at the point of delivery, as events appear to conspire against the initial formal specification. The potential consequences of this can be costly system rejection.

This paper has documented and examined the changes undertaken to a project, facing an uncertain future. It was the BAs' belief that the key to a successful handover is to transfer the IS ownership to users. This was achieved through a depoliticalising shift of

perspective in design of IT process from 'how' to 'what' so that the users' tacit knowledge could be accounted for and consequently feel ownership towards the system. The findings of this on-going research indicates the need for the further examination into the nature and characteristics of IS ownership with detailed analysis on the process by which IS ownership is developed.

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