2010

Understanding Project Survival In An Es Environment: A Practice Perspective

Erica L. Wagner
Portland State University, elwagner@pdx.edu

Sue Newell
Bentley College, sue.newell@sussex.ac.uk

Gabriele Piccoli
Grenoble Ecole de Management, gabriele.piccoli@gmail.com

Follow this and additional works at: http://aisel.aisnet.org/ecis2010

Recommended Citation
http://aisel.aisnet.org/ecis2010/74

This material is brought to you by the European Conference on Information Systems (ECIS) at AIS Electronic Library (AISel). It has been accepted for inclusion in ECIS 2010 Proceedings by an authorized administrator of AIS Electronic Library (AISel). For more information, please contact elibrary@aisnet.org.
UNDERSTANDING PROJECT SURVIVAL IN AN ES ENVIRONMENT: A PRACTICE PERSPECTIVE

<table>
<thead>
<tr>
<th>Journal:</th>
<th>18th European Conference on Information Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manuscript ID:</td>
<td>ECIS2010-0044</td>
</tr>
<tr>
<td>Submission Type:</td>
<td>Research Paper</td>
</tr>
<tr>
<td>Keyword:</td>
<td>Enterprise resource planning, Implementation politics, Business process innovation, Change management</td>
</tr>
</tbody>
</table>
UNDERSTANDING ES PROJECT SURVIVAL

Erica Wagner, Portland State University, Portland, OR 97207, elwagner@pdx.edu
Sue Newell, Bentley University, 175 Forest Street, Waltham, MA, USA, snewell@bentley.edu
Gabriele Piccoli, Grenoble Ecole de Management, Grenoble, France, gabriele.piccoli@gmail.com

ABSTRACT

Modern organizations are increasingly choosing to adopt off-the-shelf software applications (e.g., Enterprise Systems, ES) rather than develop tailor-made solutions. However, many studies have shown that adopting prepackaged software is difficult with these large scale, highly integrated ES, amplifying the potential for organizational conflict – in part due to their embedding of external ‘best practices.’ Research has begun investigating the process by which these best practice designs are eventually resolved within the implementing organization. We contribute to this emerging literature by seeking to explore project survival – the turnaround process by which a troubled project at go-live becomes a working information system. Using data from an intensive qualitative field study, we argue that practices are negotiated through processes of use rather than being permanently and systematically selected during a particular moment in time. Thus, we find that project survival is achieved as an outcome of a continued process of negotiation in the post-implementation period.

Key words: ES implementation, project survival, negotiated practice, qualitative research
1. INTRODUCTION

Adopting integrated software packages such as Enterprise Systems (ES) rather than developing in-house tailor-made software solutions to support business processes is increasingly common (Sawyer 2000; Chiasson and Green 2007). While an important reason for this trend is that adopting packaged software can reduce costs (because design costs are distributed across the market of adopters rather than borne uniquely by individual organizations), another important rationale is that an ES embeds ‘best practices’ (Sia and Soh; 2007; Wagner, Scott and Galliers 2006) so that by implementing the package the adopter is supposedly infusing ‘state-of-the-art procedures’ in a particular industry (Gratton and Ghoshal, 2005). This ‘best practice’ rationale, together with the increased ease of upgrading and maintenance functions (Beatty and Williams 2006), is also the explanation for promoting a ‘vanilla’ adoption. A ‘vanilla’ adoption implies that an organization configures the software to match its particular organizational environment (for example, in terms of creating tables related to its particular product components) but does not heavily customize. Thus, the mantra is that organizations need to change their existing work flows to match the software rather than change the software to support existing work processes.

However, while the adoption of packaged software is clearly on the increase (Light and Sawyer, 2007), and while the advocacy of ‘vanilla’ implementations remains strong, research suggests that there may be more implementation problems associated with this kind of software project as compared to custom-built designs (Yoo, Lyytinen and Berente, 2007; Sia and Soh, 2007), with significant costs existing in relation to software package implementations that are ‘often hidden and unrealized at the outset’ (Keil and Tiwana 2005 within Chiasson and Green 2007, 543). These are related to the need to address discrepancies between the ‘best practice’ prescriptions underpinning the ES and the legacy practices within the adopting organization (Sia and Soh, 2007). There is considerable literature therefore associated with the problems of implementing packaged software (Leonardi and Barley, 2008).

In this paper, then, we address the call by scholars to more explicitly address and understand the implications of this changing pattern of systems development (from custom-built to configuration) (Truex et al 1999; Sawyer 2001; Xu and Brinkkemper 2007; Special Issue of EJIS, 2007). We do this, not by focusing on what leads to failures and problems in this packaged software environment, but rather on what can facilitate project survival and the creation of a working information system; thus we address the recent call by Yeow and Sia (2008; 20) for more research to explore how software is made to work in situations where there is contestation over what is ‘best practice’. In doing this we advocate a change in discourse from ‘best practice’ to ‘negotiated practice’. This change recognizes how survival in contested situations can depend on negotiations that can extend well-beyond the roll-out phase; thus responding to calls for filling the significant research gap on post-implementation and use of packaged software (Leonardi and Barley 2008). We address the following research questions: How does an ES project survive despite resistance during and after implementation to become a working information system? Specifically, how are contested ‘best practice’ configurations negotiated during this process? We do so with a qualitative field study drawing upon a practice theory perspective (Orlikowski and Scott, 2008). Our article is structured as follows: the next section presents the theoretical framework informing the study, followed by the research methodology. The qualitative data are organized into a case description, followed by the case analysis. The last sections provide a discussion of the findings and a conclusion.

2. THEORETICAL FRAMEWORK

Custom-built software applications presuppose a high degree of congruency between the system and the business routines it supports; this is not the case with packaged software where the logic of the abstracted
‘best practices’ may me in conflict with the logic underpinning the activities of at least some parts of an organization (Berente et al., 2007). A practice perspective (see below) would recognize this, seeing practice as always locally defined and emergent (i.e., in a particular time-space). This local emergence includes the technology as well as the social (Orlikowski, 2000); indeed the essence of the practice perspective is that the material and the social are mutually constituted (Giddens, 1984) and so inseparable. In this sense, structures (e.g., the rules and routines associated with a ‘best practice’) are not embedded in the ES, but rather are enacted and emergent as users draw upon the ES in their situated practices. This does not deny the materiality of technologies, but rather recognizes that their materiality is only consequential when human actors draw upon it in their practices (Jones and Karsten, 2008). Thus, a practice perspective seeks to explore how the materiality of an ES is consequentially drawn upon as people engage in their daily work.

There is no single ‘practice theory’ (Schatzki et al., 2001) but rather a range of different theories and perspectives that have as their unifying feature that they focus on people’s everyday activities and how these are produced and reproduced in a particular historical and social context to create structure and meaning (Levina and Vaast, 2005). In this paper, we draw upon some of the key defining features of a general practice perspective as defined by Orlikowski and Scott (2008) to develop our theoretical lens to explore our case of an ES implementation in a US-based university: sociomateriality; performativity and relationality.

First, we have already identified how a key defining feature of practice perspectives is that they reject the agency/structure (or voluntary/determinist - Schatzki et al., 2001) dualism inherent in most modernist and positivist social theories. As Jones (1998 within Orlikowski and Scott, 2008) importantly notes, “rather than seeing humans with clearly-defined goals applying technologies with clearly-defined properties to achieve clearly-defined organizational effects, therefore, we need to understand the process of information systems development and use as an ongoing double dance of agency” (p. 299). The notion of a sociomaterial assemblage (Orlikowski and Scott, 2008) captures this aspect of a practice perspective. The material and the social both have agency but this agency is never known in advance and is only revealed in practice; the material and the social are mutually and emergently productive of one another. Material objects are interwoven with and inseparable from social activity (Orlikowski, 2007), constraining and enabling practice, but never dictating what is possible. An ES is thus seen as a ‘composite and shifting assemblage’ of the material (IT) and social, directing our attention to a focus on how this assemblage changes over time as those involved draw upon the ES to provide meaning, to exercise power and to legitimate actions (Giddens, 1984).

Second, the concept of performativity emphasizes how relationships between humans and technology are never fixed, but rather are enacted through practice, including discursive practice. This means that ‘pursuing the same thing necessarily produces something different’ (Nicolini, 2007; 894). It is in the act of practice that the relation is defined; and each act produces a different relationship. Pickering (1993) provides a useful lens for looking at this performativity which he describes as a dialectic process of resistance and accommodation that produces unpredictable transformations in the sociomaterial assemblage (or mangle as he calls it). Language, as a form of practice, has particularly important performative properties, and if persuasive and convincing, can help to create a relatively stable order about the meaning and legitimacy of the nature of IT and its consequences. However, language can also fail to persuade so that alternative discourses come into play about meaning and legitimacy. Exploring the resistances and accommodations across the multiple practice communities as they act with the ES can therefore help us to explore how the sociomaterial assemblage is performed over time.

Finally, just as people and things are constitutively entangled as sociomaterial assemblages, these assemblages exist in relation to other assemblages across the organization. Communities-of-practice
develop sociomaterial arrangements to account for actions and interactions in a manner that is reportable to others and will be taken to imply legitimacy. To be involved in a practice implies a level of competence such that one can account credibly for one’s actions (Garfinkel, 1967). Thus, the formation of communities-of-practice is related to the performance of meaning (Nicolini, 2007) and the negotiation of identities (Wenger, 1998). All work exists within a broader ‘field-of-practices’ (Schatzki et al., 2001), so that there are multiple fields-of-practice which both unite and divide agents (Levina and Vaast, 2005). That is, within a community-of-practice such as accounting, common interest unites agents, while across communities-of-practice, where accounting must communicate with scientists for example, differences in the field-of-practices will create boundaries and potential conflict. Therefore, to understand the impact of the introduction of an ES, we must be sensitive to the broader context of interconnected sets of practices in which work is located. Most importantly, the introduction of an ES which is designed to cut across fields-of-practice will shift the sociomaterial arrangements and so upset the fragile balance existing between interconnected practices.

While we can identify these different aspects of a practice perspective, it should be recognized that these three concepts are not truly separable – those within particular localized communities draw upon information systems to provide meaning, exercise power and legitimate actions on a daily basis. These stakeholders confront resistances and find ways to accommodate their needs over time. These resistances and accommodations can occur both within and across practice communities making negotiation key to the survival of an ES project. It is this negotiation, as played out in the practices within and across communities over time (including post-implementation) that we focus on in our analysis of the case. In doing this we seek to explain how a contested ES project can survive through a process of negotiated practice; a process by which actors, seeking a cooperative outcome, reexamine the best practice ideal in order to create a good enough solution for all involved.

3. METHODOLOGY

Our work is based on an inductive approach to theory development, informed by an interpretive research perspective and a longitudinal case study (129 narrative interviews with 53 actors representing both those involved in the project and faculty and their support staff using the system) between June 1999 and August 2000, with follow-up interviews in 2002 and 2005. We gained access to sociomaterial arrangements that constitute shifting reality through the collection and analysis of language, symbols and artefacts (Klein and Myers, 1999). Specifically, our case study is set in the educational context, where we followed an ES implementation by a prestigious university we call ‘OldU’. The stated objective of the ES project was to improve work practices for all members of the university community. The first author made four, eight week visits to OldU, during the implementation and post-implementation phases of the project - providing access to the variance between the business practices inscribed in the ES and those in use within OldU, as well as how these differences were resolved.

Recognizing the performative nature of language, we adopted the narrative interview convention in order to avoid asking leading questions. The narrative interview convention provides a time frame to structure the interview ["Tell me what happened since we last met."] and then encourages uninterrupted storytelling related to issues of central importance to the interviewee (Bauer, 1996). Consistent with the interpretative tradition we seek ‘validity…not [from] the representativeness of the case in a statistical sense, but on the plausibility and cogency of the logical reasoning used in describing the results from the case and in drawing conclusions from it.’ (Walsham, 1993; 15). This research design enabled us to see the material and social assemblage that was produced over time and how such arrangements were resisted and accommodated (Pickering, 1993).
4. CASE DESCRIPTION

OldU had historically been organized in a decentralized manner. However, an increasingly complex operating environment called for more transparent accounting practices in order to manage institutional risk, comply with regulatory bodies, avoid litigious hazards, and act as competent fiduciaries. In the summer of 1996, OldU’s board of directors endorsed moving away from discrete silos of activity to adoption of the [GlobalSoft] enterprise solution because of the strength of its financial package which was considered a “best practice” product that would support an integrated approach to accounting and budgeting. The VP for Finance saw this as enabling a welcome shift away from what many in central administration considered antiquated and simplistic practices – known as Commitment Accounting (CA)\(^1\) – to a more corporate model of budget and planning called ‘Time-phased Budgeting’ (TPB)\(^2\). However, once rolled out, the academic community was perplexed to find that the ES was designed without their valued CA practices. Not long after implementing the ES, tensions between faculty and their support staff (FSS) became evident. Rather than acquiesce to the ES’s design, faculty and their staff began to mobilize resources in an attempt to reinstate their legacy accounting practices – opening a lengthy post-implementation set of negotiations. Seeing the difficulties their staff were having in trying to work with the ES and worried that the new academic year would bring complications, several faculty approached the sponsors of the project with their concerns. It was at this point that the rhetoric of the project team changed. In an attempt to move the troubled project forward and get the faculty to work with the ES, the team agreed on three courses of action. First, they agreed to leave the legacy CA system running until commensurate ES functionality was created. Second, they agreed to mimic CA practices in the ES environment by customizing the software. Third, they agreed to make organizational changes to support the transition to an ES-enabled environment. These were seen by the project team as temporary fixes. However, they still exist at the time of writing. Thus, while TPB failed to take hold at OldU, the ES is up and running and being used successfully within all OldU communities.

5. DATA ANALYSIS

Our analysis of the data identifies a series of episodes that help us to understand how this ES project survived despite a high level of contestation that could easily have derailed the project. 

**Imposing a ‘Best Practice’**: With the introduction of the ES, central administrative leadership seek to modernize administrative practices by introducing discourse around what they consider best practice financial management - TPB. This performative use of language was successful in enrolling and translating the interests of certain key actors, including central administrative managers, super-users, and most importantly the project team. Given this shared ontological perspective, the project team selects strong design inscriptions in an effort to ‘set up a new environment’ and ‘force change’ through material objects (Schatzki et al., 2001). However, at go-live, the project team arrived at something unexpected – they were unable to realize the change they wanted.

**Encountering Resistance**: After trying to work with the ES, the FSS rejects the ES because the design of the financial management module made it nearly impossible to provide faculty the information they wanted about the financial status of their grants. The academic constituencies are invested in a particular way of working (Carlile, 2002). The design of the ES is not strong enough to force a change to their practice, and the faculty deems a number of processes – of which TPB becomes the poster-child –

\(^1\) This is an approach similar to balancing one’s checkbook. The remaining balance equals all debits and credits as well as a hold for items where monies have been committed.

\(^2\) An approach to budgeting that requires the allocation of funds across the grant’s timeline. The focus here is not on a remaining balance but on evaluating one’s actual financial position against their budgeted expectation.
unsatisfactory in its “lack of understanding and regard for the people bringing in the money and the people doing the work”. Thus, while the project team and central administration considered the development and implementation of the financial module a success, the faculty and their support staff have a different interpretation. It is our ability to continue the analysis beyond implementation that enables us to explain “how use affects redesign” (Leonardi and Barley; p. 166). Focusing on the relational differences among agents (Osterland and Carlile, 2005), we see how the division of practice between administration and FSS allowed for specialized knowledge but then at implementation how these boundaries become boundaries to sharing knowledge. The entire definition of accounting practice is called into question at OldU when TPB is presented as the best practice for grant accounting. The assemblage of material and social that emerged in the ES-enabled environment undermined the legitimacy of CA. It is well documented that material constraints and affordances embed power relations that play a part in negotiating for changes (Callon, 1986; Law, 1986) and achieving a shift of resources and routines “by setting up an environment…and a set of changes at the top that force change regardless of whether its consensus or not”.

**Accommodation:** FSS and academic managers “struggle for quite a while [with the ERP]” and only after finding that their needs cannot be met through the design inscription of TPB do they use their resources in a power play and claim to be ready to ‘create their own commitment system’. Other genuine attempts at compromise by FSS who “tried to work with it’ illustrate an emphasis on turning around and ensuring survival of the project. In the same vein the central administration and project team network become increasingly “appeasement oriented” and allocated time and development resources to ‘build things that could create and manage commitments’. While neither community ultimately achieves its ideal grant accounting design, the modifications to software and organizational arrangements translate enough interest from each community to reach a (temporary) stable environment. Since artifact designs reflect network viewpoints (Monteiro, 2000), we see that the post-implementation design inscriptions are delegates (Walsham, 2001) for the cooperative approach. The opposing sociomaterial communities begin negotiating mutually agreeable practice that will help to stabilize an outcome in the form of a customized system that could create and manage commitments and a support center for giving departments a crutch.

**Achieving a Negotiated Practice:** Our data show that negotiated practice is itself a process of trial and error, where, after opening to compromise the competing communities begin to accommodate one another and reformulate the sociomaterial arrangements in order to gain acceptance by all. Our data show how negotiated practice takes form, first by a change in perspective following resistance, subsequently followed by a shift in action. The central administration and project team’s rhetoric evolves, from dictatorial (“You don’t like it? You are out of the consensus picture”), to conciliatory (“We became appeasement oriented”), and a willingness to respond to faculty needs emerges progressively. Similarly the faculty and staff network becomes willing to ‘make things better’. Finally, through the development of various artifacts – the creation of an integrated Accounting & Budget department, the temporary support of the legacy application, the development of a custom CA application added to the financial management module, and the Transaction Support Center, the negotiations are stabilized, at least temporarily. Not only are technological artifacts and business processes being created to meet their CA practices, but resources are being allocated to support them during the transition. This demonstrates that material objects do things that cannot be attributed to social practice alone (Leonardi and Barley, 2008). It is through this process of negotiation and cooperation, formalized and inscribed in the artifacts it produces, that previously disparate communities start to unite. Note that this process unfolds over twelve months, *after* go-live, demonstrating that post-implementation negotiations and the attainment of a working information system can be a lengthy and difficult process. Moreover, what is expected to be only temporary modification on the way to the standard ES becomes a permanent design. Adhering to the standardized best practices – as embedded in the ES ‘computer system’ – is no longer the highest priority. This is an indication of having achieved negotiated practice, where social structures emerge that enable
the IT to become part of everyday work (Levina and Vaast, 2005) with previously disparate communities merging enough to allow for the development of a working information system.

6. DISCUSSION

Our analysis shows how ‘best practices’ that are inscribed into a software package during the configuration/implementation phase became contested during the post-implementation period and how the conflict is overcome once those involved recognize the troubled nature of the project and choose to negotiate selected practices in favor of creating a working information system over a best practice ideal that remains unused. An important result of these findings is that being able to effectively translate interconnected interests into material arrangements, a prerequisite to project survival, is a process of cooperation that requires considerable time and resources and is unlikely to happen before users can actually engage with the technology in their everyday practices. Thus, we understand project survival as a dynamic process of power and cooperation involving negotiations about practice that continue into the post-implementation period.

In this discussion section we explore this negotiated practice associated with project survival through the three key characteristics of a practice perspective that we have previously defined – relationality, performativity and sociomaterial assemblages (Scott and Orlikowski 2008). Considering these aspects of practice, we can say that in the beginning, central administration identified only one acceptable version of what the sociomaterial assemblage should be and, in fact, dismissed the notion that there could be an alternative. They assumed that the ES would create practices that performed the organizational reality which they endorsed - a performativity consistent with their view of how to manage budgets. In doing this they ignored the relational boundaries between administration and faculty, assuming that faculty would move quietly into following their practices. Faculty on the other hand, assumed that the ES was being designed with their existing practices in-mind and so were shocked when they found that their practices were not afforded in the new sociomaterial assemblage. At that moment the ES project is particularly vulnerable. However, it is also at that moment that both ‘sides’ begin to recognize the practice boundaries that divide them and that these are not easily ignored if they want the ES project to survive. In our case, the response was to recognize the relational boundary and alternative performativity discourses and work to create a sociomaterial assemblage that could support different practices in the post-implementation environment. We discuss each element next.

While existing literature highlights that best practice claims are contested in practice, it suggests that these claims are eventually embedded into the software itself thereby resolving the conflict (Yeow and Sia 2008). In contrast, the notion of negotiated practice recognizes that the materiality of a technology exists only in relation to the humans who use it so that the material design is always subject to interpretive flexibility. The implication is that one cannot count on forcing software-based best practices upon a population, even when a strong material design exists within the ES. Rather, one should come to expect a need to negotiate by rearranging the sociomaterial elements of a practice. Post-implementation negotiations, if appropriately channeled, will engender a willingness to discover design assemblages that move the organization toward a working information system. This suggests that respecting competing practices and carrying forward some legacy practices, can help smooth the post-implementation phase and avert potential failure, despite the fact that this may make migration and future upgrades more difficult. Exemplary of this is parallel offering of CA accounting and TPB which reduced resistance.

It is naive and dangerous to think, however, that negotiated practice can benevolently accommodate everyone. Not all preferred legacy practices can be accommodated and incorporated into the new sociomaterial assemblages. Rather, we suggest that project managers seek to mould together critical established practices and the aspects of the proposed ‘best practices’. Thus, a central concept in this
theory of project survival is the notion of selective accommodation where one must distinguish the essential debates from issues of preference alone. The idea of selectivity as it relates to system initiatives has only begun to be addressed. Recent work identifies “critical issues” that will ‘develop in their own good time’ and must then be addressed by project management because of their potential to stall the project (Ramiller, 2005; p. 72). Future research, perhaps using cross-sectional analyses, should seek to verify whether our case is representative in that there are often just a few functionalities that are deemed critical. If this is the case, the long tradition of work devoted to user requirement elicitation in the IS literature (Browne and Rogich, 2001; Hickey and Davis, 2004) should provide a solid basis for research on the timing and characteristics of the pre- and post-implementation identification of these critical functionalities.

The practice perspective reminds us that work practices are strongly held legitimizing devices for actors and therefore, when considering the packaging of ‘best practice’ concepts into software it is important to recognize that this de-legitimizes other practices. Strict adherence to the ‘best practice’ ideal will therefore likely create resistance, as here. The point at which the OldU project team became appeasement oriented demonstrates the power of language to shape action. This turning point in the project shows that movement within the implementation was first a matter of thinking and speaking differently about the project’s objectives. A change in perspective precedes shifts in action and as such, before practice can be negotiated, opposing perspectives need to respect alternative interpretations of what is ‘best’. Our data suggest that the less focused on an ideal solution competing practice-communities are, the more likely it is that the negotiation (cycles of resistance and accommodation) will be successful.

Project survival thus depends on gradually learning to understand how to negotiate through the post-implementation period as individuals began to deploy the IT in their everyday practice, but also expecting that there will be elements that cannot ever be planned for because there are aspects of life that are emergent and non-linear. In a theory of project survival it is thus important to recognize that even the best planned projects will need modifications of some sort. This insight explains compromise as a necessary characteristic of negotiating practice not to be viewed as an indication of failure to force change. Rather, cooperation amongst sociomaterial elements must be sought in order to effectively negotiate a workable practice and this requires time for experimentation and learning. Thus, our case shows that conflict over a particular practice, subsequent negotiation and conflict resolutions are necessary aspects of the post-implementation phase where attention and some creative thinking can help substantially. This suggests that scholars must recast IS appropriation/assimilation from what has traditionally been considered the relatively static final phase of development where users eventually overcome a steep learning curve, to a time of negotiation and change amongst the various socio-material relations that must be accounted for and legitimized (Swanson and Ramiller, 2004; Leonardi and Barley, 2008).

The IS literature has long identified the political and conflict-based undertones of new systems design, development, and implementation projects (see Jasperson et al., 2002 for a review). Our study certainly shows the occurrence of conflict and the practice perspective helps us to understand this conflict. When these relationships are disrupted by the new sociomaterial assemblage, users resist and conflict occurs. This is particularly the case with enterprise-wide implementations where conflict occurs because of overlapping practices so that change in one practice-community has an impact on another. The interesting aspect of our case, however, is not the existence of conflict, but rather the motivation towards cooperation that was observed, with both sides coming to realize that they would need to compromise if the project was to survive. Thus, the more important dynamic at OldU was the willingness and effort toward reparation of discord culminating in the achievement of stability not through the dominance of one practice community, but rather through the coalescence of interests just enough to create a jointly viable solution. The double dance of agency holds true in our case where information systems development and use was negotiated rather than prescribed. Projects are thus more likely to survive through contestation
where all involved recognize and respect relational boundaries between practices and understand the need for cooperation and compromise.

7. CONCLUSIONS

Our contribution to IS literature consists in focusing attention on the sometimes extensive set of post-implementation activities that enable troubled projects to survive and result in ‘working information systems’. A working information system is one that is accepted and used across the organization, perhaps not the unanimously optimal solution, but one that is good enough and enables the organization to move forward with its work. Thus, one of the primary contributions of our paper is an initial attempt at understanding project survival by defining the characteristics of negotiated practice from a practice perspective. In our case, negotiated practice depended on first recognizing and then, selectively accommodating competing sociomaterial arrangements by adopting a cooperative approach. Proactively managing this process, and identifying the critical areas where compromise was needed, helped to smooth out complex implementation efforts. Future research can usefully focus on the ways in which projects survive to produce working information systems in different environments. Note however that this stance is fundamentally at odds with a so-called ‘best practice agenda’ because of the epistemological position that in-use negotiated practices are best for organizations.

Our demonstration that troubled projects can survive in spite of initial fears of non-use is a first important step, future research should seek to generalize and extend our findings. In a context where project abandonment was not considered a viable option, there was a need to find ways to move forward and this was achieved by cooperation and compromise. In other settings there may be a similar reluctance to abandon an ES project because of the sunk costs already invested; however, future research needs to identify whether the cooperation evident in the current case is unique to this kind of loosely-coupled organizational setting (Newman and Noble, 1990). Longitudinal studies designed to follow troubled projects through their post-implementation phase would be helpful for testing the negotiated practice concept and add to our rudimentary understanding of project survival. In particular, it is important to explore project survival in different organizational settings; given the uniqueness of the university environment future research needs to identify whether the ways in which practice was negotiated in the case examined here, are similar or different in less democratic organizational environments. Thus, in different organizational settings there may be less willingness to compromise with users; faculty in a university are a relatively powerful stakeholder. In others situations, user objections to new software may be easier to ignore. However, this does not mean that users in other settings will not find ways to continue with their legacy practices in the new environment through new sociomaterial arrangements. For example, users may maintain separate spreadsheets alongside the ES. As our practice perspective reminds us, technology does not determine behavior, rather the technical and the social co-emerge in ways that are never fully predictable. A golden opportunity for research in this area is provided by studies based on a re-analysis of IS ‘failures’ by studying their eventual outcomes and any working information system that emerged. Changing the discourse surrounding project work is a necessary first step to shifting project actions. Organizations can and should plan the project, but at the same time also trust and use post-implementation creative errors’ – which of course, so defined, are not errors at all but an integral part of the survival process.

References


