The uses of user resistance for the institutionalization of power in system implementation

Ibrhim Almatrodi, Norwich Business School, University of East Anglia, UK
ibrahim.almatrodi@uea.ac.uk

James Cornford, Norwich Business School, University of East Anglia, UK
j.cornford@uea.ac.uk

Abstract

User resistance to the implementation of new information systems (IS) is a well-established feature of the IS literature. Much of this work takes a managerialist perspective, seeing user resistance as simply dysfunctional, seeking effective ways for system implementers to overcome resistance or concerned to understanding the roots of user resistance. Occasionally, user resistance is seen as having positive qualities. In this paper, however, we want to explore the wider, deeper, and subtler uses of user resistance for systems implementers. We have adopted Clegg's "circuits of power" framework within a broader political process approach to change. Using this framework and the results of a small pilot study, we make a number of propositions that can be tested in forthcoming fieldwork. This paper forms part of a wider study of the institutionalization of the power of "internal consultants" in a higher education institution in Saudi Arabia.

Keywords: User resistance, Power, ERP, consultants.

1   INTRODUCTION

Information and organization can be seen as two sides of the same coin: organization is a fundamentally informational activity, and the process of informing is fundamentally a question of organization (Stinchcombe, 1990). Information systems, in their widest sense, are therefore central to an organization's structure and functioning. This centrality has brought information systems professionals into the heart of the organization. Chief Information Officers (CIOs) now sit on the boards of many organizations and head large departments with significant budgets. Moreover, information can be seen in all aspects of the organization and extends beyond its boundaries to customers, suppliers, regulators, strategic allies, and other stakeholders, so that those who can "speak for" information have become potentially powerful actors within the organization. Our concern in this paper, then, is to explore the subtle uses of "user resistance" by systems implementers in order to institutionalize their power within the organisation.

We have focused on the uses of user resistance, because we have found that much of the literature on user resistance sees the phenomenon as straightforwardly dysfunctional, a problem to be minimized, avoided, or overcome. Another tradition has sought to understand the roots or bases of user resistance (e.g., Kim and Kankanhalli, 2009; Polites and Krahanna, 2012). A less developed tradition has looked at implementers' responses to user resistance (e.g., Carson and Griffeth, 1990; Shang and Su, 2004; Seo, Boonstra, and Offenbeek, 2011; Rivard and Lapointe, 2012). In some of this work we find occasional acknowledgements of the functional nature of resistance, e.g., providing a chance to test and improve decision making and systems design (e.g., Quinn, 1976; Hirscheim and Newman, 1988). However, we have found no more than a few hints as to the ways in which systems implementers can benefit from user resistance in the wider process of institutionalizing their power base within the organization.

The remainder of this paper is organized as follows. The next briefly section reviews the existing IS literature on user resistance. The succeeding section introduces the political process perspective, specifically Clegg's framework of the three circuits of power. We then examine the methodological issues related to power, focusing on the significance of narrative as a way of studying power. A penultimate section attempts to illustrate the framework developed, using a small number of potentially testable propositions as a focusing device. We conclude with the key implications of our discussion and a consideration of the limits of our approach.

2   USER RESISTANCE LITERATURE REVIEW

Power and conflict play a central role in IS development and implementation. Even since 1980, scholars recognized that IS development and utilization require more than technical or rational approaches; they need political approaches, as well (Keen, 1981; Markus, 1983; Franz and Robey 1984; Robey, Smith and Vijayasarathy 1993). Information systems implementation often leads to changes in power relationships and have thus become a major site of organizational conflict and competition. Such conflict is frequently seen as a major cause project failure (Smith, 1989; Franz and Robey 1984; Davenport, 1998; Besson and Rowe 2001). To overcome such problems many researchers have proposed various forms of user participation. For example, many researchers (e.g., Markus 1983; Wagner and Newell 2007) encouraged the involvement of users, because they found that involvement played a significant role in dealing with resistance and conflict in the implementation of IS. However, user participation has also been seen as simply another method of control which can ensnare not only the user but also the change agent herself (Howcroft and Wilson, 2003). This focus on the dynamics of conflict and its resolution highlights the importance of analysing the cultural and political forms of the organization itself (Johnstone, Huff and Hope, 2006).

The roots of resistance toward new IS are not entirely about technology-related issues but include matters related to change and political issues in organizations. Once new IT systems are introduced to organizations, they clearly have an influence on the organizational, intergroup, and individual levels of the organization, which causes resistance (Quinn, 1976). Markus' (1983) classic study on theorizing resistance has clarified that this behaviour is related to the interaction between the applications, features, and the organizational context of the new technology. Other researchers went in depth to try to understand the ways that users resist implementing IS. Hirschheim and Newman (1988) demonstrated that resistance ranges from making sure that the system does not work to damaging the system, and such actions may take the form of power and political struggles. This exploration for understanding the causes or the ways to deal with resistance continued, and showed that this behaviour has a link to psychological, behavioural, economical, organizational, and technical problems that all can trigger resistance (e.g., Polites and Krahanna 2012, Klaus, Wingreen and Blanton 2007, Jiang 2006)

The literature on the wider uses of resistance for institutionalization of power is very limited; instead, studies tend to view user resistance as functional or dysfunctional at only a project level. For example, Markus (1983) pointed out that resistance could be damaging, because it engenders conflict and ill will, and it consumes time and attention. However, resistance can also be functional for organizations, because it can inhibit some types of systems that cause stress, turnover, and a reduction in performance. Thus, resistance can be positive, a force to be used, and a source of innovation in the process of change if it is managed well (Hirschheim and Newman 1988; Vrhovec and Rupnik 2011). Effective management of resistance encourages users to discuss the problems of the new IS. Only when the new system is prevented from being adopted successfully is the resistance seen as fully dysfunctional (Rivard and Lapointe, 2012). Those studies have explained how resistance has many causes and have suggested many ways to manage it from the point of view of IS projects.

In spite of the wealth of studies of user resistance and the managerial responses to it, there has been little consideration of the wider consequences for the organization and for the institutionalization of

power for certain IS actors in organizations. This has been identified by Rivard and Lapointe (2012) as a significant gap in the literature. However, in order to shift the focus of analysis from the individual project, and its success or failure, to the institutionalization of power relations within the organization, we need to draw on the wider literature on organizations and power as well as the IS literature. Specifically, we propose to draw on the traditions which understand the organization as a political domain and specifically the political process approach to organizational change (see e.g., McLoughlin and Badham, 2005). We want to use this approach to understand better the political involvement of systems implementers in organizations and how they represent the systems, stakeholders and the benefits of the new innovations in the adopting organization. In particular we are concerned with the roles which user resistance to IS development can play in such political process and how it can figure in the institutionalizing of IS actor's power. For achieving this goal we have adopted Clegg's (1989) circuits of power.

3   CIRCUITS OF POWER

In order to abstract and organize for analytical clarity, we have drawn on Stewart Clegg's Circuits of Power framework. Clegg's (1989) circuits of power arise in three forms: episodic circuits, social circuits, and system integration circuits.

- The first circuit (the episodic circuit) is the causal power that focuses on the agents' genuine interests and aims to explain their interests. This seeks to explain how a given agent A comes to exercise power in their interests over a given agent B.
- Then, social integration, which is dispositional power, follows the dominant purpose of establishing and re-establishing the relations of meaning and membership. In one way, this social integration can be linked to how legitimacy, authority, and rules can lead to realising and using resources to empower (a class of) A's and disempower (a class of) B's.
- Finally, power in the system integration circuit is practiced through discipline and production; it concerns how merging and disciplining agencies can be guaranteed by applying methods such as contractual agreements and control over the physical environment (Clegg, 1989; Backhouse, Hsu and Silva, 2006; Silva, 2007; Silva and Fulk, 2012).

We might see this final system integration circuit as akin to the ANT concept of a set of Obligatory Passage Points (OPPs) which shape the flow the flow of actions and translations (Callon, 1986).

4   RESEARCHING POWER

Power is a notoriously difficult concept to research in organizational context: the effective exercise of power is often self-effacing; it can be a contentious and conflicted issue where the accounts that participant give constitute, as well as describe, power; and the researcher cannot stand outside questions of power but must necessarily engage with and participate in the power structures, practices and processes that they research (for example, by awarding an interviewee the status of 'key informant'). A key feature of the *institutionalization* of power relations is their naturalness or taken-for-grantedness and this in particular makes them hard to research as respondents find it difficult to construct the necessary counterfactuals to reflect on the non-natural nature of a given political order. One response to this, has been to study power relations 'in the making,' while issues and conflict remain "hot," counterfactual alternatives are available and the outcome has not yet become solidified and legitimized.

It is, however, not always possible to study the institutionalization of power "in the making" and research becomes retrospective and reconstructive. In this context, we need to ask how we should interpret what our data – as testimony from human informants, from texts or in other forms – tell us. We need to read such data through a complex hermeneutics of suspicion (why are they telling me this?) as well as a hermeneutics of recovery (what 'really' happened?) (Klein and Meyers, 1999). A

powerful way of mobilizing this more subtle reading of the data is through the notion of narratives of power that sees "change agents as the authors, scriptwriters and casting directors of technological change" (Dawson and Buchanan, 2005: 846). Within the political process approach, control over narrative is seen a potential important source of power. As Buchanan and Dawson argue,

> *The story telling skills associated with constructing a compelling and convincing account can be viewed as a another power base that may often overlap with others, for example in the use of expertise, and as such, is an effective political instrument for influencing others (2005: 859).*

The accounts that are given can therefore be seen not (just) as representations of affairs but as, usually conflicting, attempts to regulate and order affairs. A reading in this register is not interested in the 'truth' of these conflicting accounts but in 'the importance of narrative and the rescripting of histories in justifying, directing, shaping and steering processes of technological change" (Dawson and Buchanan, 2005: 855). Our concern in this paper is with the ways in which "power is exercised through the construction and management of compelling stories that shape change" (Dawson and Buchanan, 2005: 845). In particular we are concerned to focus on exploring the wider, deeper, and subtler uses of user resistance for systems implementers as presented by informants, directly and through documents, and the narrative uses to which they put the concept in their accounts.

5   THE RESEARCH CONTEXT

The research context is a small pilot study – three in-depth (1-1½ hours), semi-structured key informant interviews – of organizational politics surrounding the implementation of Enterprise System in a large Saudi Arabian University. The focus of the research is on explaining the institutionalization of power by a group of 'internal consultants' – the ways in which this group, now housed within a permanent organizational unit, have come to position themselves as a key resource in mediating the wider organization's interactions with information technology and associated business practices and processes. A key issue that arose from the pilot study was the ways in which the systems implementers' narratives responded to implementation problems and how they developed and deployed narratives around user resistance to justify their positions during the implementation and development of the Enterprise System.

For the implementation of the Enterprise Resources Planning (ERP) System, which started in 2007, the university decided to establish a Centre that would be led by internal consultants from the university staff. These consultants were responsible for implementing the system with the external vendor. The Centre came to play a central role in communicating with the internal and external parties involved in the implementation and, later, the development of the system. During the implementation, the system implementers faced resistance, so they deployed certain discourses with the Rector and other major decision makers to use resistance as a base for building influence to gain resources to confront most of the implementation challenges.

6   ANALYSIS

In our analysis we have sought to apply Clegg's framework to our data. Obviously with such small numbers of informants we have restricted ourselves to generating a set of propositions that can be further explored and perhaps even empirically tested, in subsequent research. Those interviews were first transcribed in Arabic and then translated to English. Thematic analysis procedures were followed to code the data by linking the data into the theory (each circuit of power) as 'a senstising device to view the world in a certain way' (Klein and Meyers, 1999, p.75).

In 2007 The University decided to implement the ERP sysem for the many advantages that the system can bring to the organization. As one respondent explained:

Five years ago, we were in a need of this system because at that time we didn't have a shared database for all the systems we had, which were a necessity. The Finance Department used to have a system as did the HR, the warehouses, and the Administrative Communication. We made it possible through this new system to integrate those different systems into one system [Assistant Manager, C].

In accounts of the implementation of this system we noticed the deployment of the notion of "user resistance" to increase the influence of systems implementers and their capacity to achieve an implementation judged to be successful. But this deployment of user resistance also led to a more profound institutionalising of the power of the systems implementers (as internal consultants). This can be made particularly clear by following the Clegg Circuits of Power analysis.

First, at the episodic level of analysis, the internal consultants used the notion of user resistance to create internal and external alliances which helped to unlock additional resource for systems implementation. Solutions to user-related implementation problems, such as training, were presented as additional costs and were used to justify increased budgets.

At the social integration level, the internal consultants first had to establish their own internal legitimacy as powerful members of the organization. To do this they deployed user resistance, and their expertise in overcoming this resistance, to justify the permanent establishment of a discrete and permanent organizational unit. Through the issuing of certification following training, the consultants were able to symbolically expand the membership of Enterprise System's allies among the user group.

At the system level, the internal consultants deployed user resistance to justify intervention into the organization's core Human Resources systems, specifically by linking the training-related certification to promotion (and associated financial benefits), together with displacement of users who continued to 'fail' to use the system, they were able to reconfigure the organization's disciplinary systems.

Linking all three levels, we appear to have observed the deployment of user resistance, and the consultant's claimed expertise in overcoming this resistance, to justify the consultants' collective roles as what has been called an Obligatory Passage Point for the organizations' adoption of information technology.

Circuits of Power	Information that Led to the Advancement of the Proposition	Proposition
Episodic power - How systems implementers compel the senior management and the users do something that the top management or users would not otherwise do.	Systems implementers' use of resistance has created alliances between different actors internally and externally.	Proposition 1 Successful systems implementers use resistance to gain more resources to deal with implementation challenges, including resistance. "We saw resistance to change; users don't accept change…. The university dealt with this problem by giving certificates and bonuses for certificates for learning to use the system, and this counted for the employees at the time of promotions." [External Consultant A]. "So the university administration provided a huge amount of support for the people who wanted to implement the system, but the project gave the right to change the employees who resisted the system…. So the university rector understood the point of change, and he used to say "buy their time if they

		don't have time." [internal consultant, B] "Of course, change management required the intervention of consultants because there was a strong resistance in this ERP project." [Internal Consultant, B]
Social integration In order for systems implementers to convince others of their advice, they must be legitimate enough in the institution and must be capable of reaching and negotiating with senior management and users.	Implementers can persuade users to accept their advice through the establishment of a department in the organization that has a central role to play in the implementation of IS and through the building of alliances with different actors in the implementation inside and outside.	Proposition 2 Successful system implementers gain credibility from their knowledge and top management by justifying their advice in dealing with employees who are resisting the system. "All of this (implementation problems including resistance) requires persuasion with the support of senior management, and there is also the use of power" [External Consultant, A].
System integration power is expanded in the use of resistance through the discourses in the organization; when this power is institutionalized, the use of resistance also becomes a source of power to be used in such circumstances that challenges system implementers.	Senior management would not accept the threat unless there is a risk of losing investments on the new system due to such resistance.	Proposition 3 Successful systems implementers recommend that top management give incentives, such as rewards to people who support the systems implementation and enforce sanctions to people not supporting the system in such a way to influence their behaviour. "…Provide certificates for people who support using the new system. For the people who resist the system, reduce their influence and contact with the project." [External Consultant, A].
Systems implementers' use of resistance can be considered an OPP for systems implementers, because it influences users to adopt practices and actions that they recognize as necessary for the people involved in the implementation process.	The receivers of the advice of systems implementers can look at the advice and declare that it is not necessary or that it is highly expensive. However, the implementers can apply resistance as an OPP to justify their positions and advice.	Proposition 4 The use of resistance for the institutionalizing of power is insured if there is an agreement on the necessity, an application of the advice, and a support for the actions required from the top management. The institutionalizing of power is achieved if the use of resistance let's A's make B's do something that B's otherwise would not do to secure the "obedience" of users and administration according to Circuits of power terminologies.

Table 1.   A framework for the uses of resistance for systems implementers in systems implementation.

7   RESULTS

It seems that the main result of this pilot study is to show that the fact of unconvinced users, which could be seen as the result of the weak communication of the university vision and ambition to the level of users, has instead been reframes as "resistance" and sued to institituionalise the internal

consultants' power, initially in order to implement the ERP. Much time and effort was spent in modifying the system to the users' requirements. This was explained by one respondent follows: "as employees we were used to a previous system, which did the needed work and was easy to use. We started to ask ourselves what the new system was for and it was not meeting our expectations. And then a resistance happened, and there was disagreement of views in implementing the new system... We found out that the new system needed many modifications, and we worked on this until we achieved what we have now. All of this was because of the pressure from senior management to implement the system quickly" [Assistant Manager, C]. Another respondent summed it up as follows: "Don't say that we failed. No, we were successful, but there was a need to focus on the user more" [Internal Consultant, B].

For universities which wish to better utilise their internal expertise, they must first develop clear job descriptions and a methodology for carrying out such work. As one consultant explained, "Here in the university, we use internal advice, and honestly the academics' advice is not as good as the professional consultant advice." He explained further: "The professional consultant is someone who sees and works under different conditions, which is difficult to find in academics who work under the same conditions every day. The academics know a lot of theories, but these theories are not applicable everywhere." To back up this point he gave the following example of the ERP system in the university: "you cannot dismiss the people resisting the system due to the rules that govern the way public workers work in the public sector. In the private sector, if a decision has been made regarding the use of the new system, the employees have to follow up and use the system if they want to continue working in a bank or a private organization. Yet, here in the public sector or the university, even if the rector or the minister wants the systems to be used, a small employee can create problems and not use the system successfully. Thus, those theories mostly fail in the public sector, and you would need experts in this area if you want to insure a successful implementation of technology" [Internal Cconsultant, B]. Thus, limits on conventional labour discipline – the difficulty of sacking otherwise removing recalcitrant workers in this public sector context – might be seen as forcing the internal consultants towards entering into an accommodation with the notion of user resistance and the decision to deploy it to their own purposes.

8   CONCLUSION

This paper aimed to shed a light on the different ways that systems implementers could institutionalize their power. User resistance can be used in organizational politics to play a significant role in influencing decisions and directions inside the institution. This influence or power has been clarified through applying circuits of power. In the previous pages we have tentatively shown how systems implementers are using discourse to justify this power by employing user resistance. What is clear from this pilot study is that successful institutionalization of power around the IS function cannot be fully achieved without the systems implementers consideration of the political issues in the organization. Rather than just seeing user resistance as a problem, to be overcome, the internal consultants in our case study have turned it, discursively, into a resource to be deployed in the process of acquiring resources, legitimacy and authority.

Theoretically we are concerned to shift attention away from seeing implementers' accounts of user resistance as reflections of affairs towards a perspective that sees them as interventions in affairs. Our attention is therefore on how user resistance to technology is presented or framed by actors – for example as inevitable but manageable – and how that narrative framing serves the individual and collective interests of the storyteller.

Practically, we would suggest that both end users themselves and managers should learn to be cautious about the accounts of user resistance provided by internal or external consultants. In the same way that we should be suspicious of those who claim to speak for 'technology' or 'information' or 'the internet' (Morozov, 2013), we need to question the ways in which the notion of user-resistance is deployed – played up, played down – before making potentially irreversible decisions.

9 REFERENCES

Backhouse, J., Hsu, C. W., and Silva, L. 2006. 'Circuits of power in creating de jure standards: shaping an international information systems security standard'. *MIS Quarterly*, 413-438.

Besson, P., and Rowe, F. 2001. 'ERP project dynamics and enacted dialogue: perceived understanding, perceived leeway, and the nature of task-related conflicts'. *ACM SIGMIS Database*, *32*(4), 47-66.

Boonstra, A. 2006. 'Interpreting an ERP-implementation project from a stakeholder perspective'. *International Journal of Project Management*, 24(1), 38-52.

Callon, M. 1986. 'Elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay". In John Law (Ed.), *Power, Action and Belief: A New Sociology of Knowledge*? London, Routledge: 196-233.

Carson, K. D. and Griffeth, R. W. 1990. 'Changing a Management Information System: managing resistance by attending to the rights and responsibilities of employees'. *Employee Responsibilities and Rights Journal*, 3(1): 47-58.

Davenport, T. H. 1998. 'Putting the enterprise into the enterprise system'. *Harvard Business Review*, *76*(4).

Davis, F. D., Bagozzi, R. P., and Warshaw, P. R. 1989. 'User acceptance of computer technology: a comparison of two theoretical models'. *Management Science*, *35*(8), 982-1003.

Dawson, P. and Buchanan, D. 2005. 'The way it really happened: competing narratives in the political process of technological change'. *Human Relations*, 58(7): 845-865.

Doolin, B. 2004. 'Power and resistance in the implementation of a medical management information system'. *Information Systems Journal*, 14: 343-362.

Franz, C. R., and Robey, D. 1984. 'An investigation of user-led system design: rational and political perspectives'. *Communications of the ACM*, *27*(12), 1202-1209.

Hartmann, T., and Fischer, M. 2009. 'A process view on end-user resistance during construction IT implementations'. *ITcon: Special Issue Next Generation Construction IT: Technology Foresight, Future Studies, Roadmapping, and Scenario Planning*, *14*, 353-365.

He, J., and King, W. R. 2008. 'The role of user participation in information systems development: Implications from a meta-analysis'. *Journal of Management Information Systems*, *25*(1), 301-331.

Hirscheim, R. and Newman, M. 1988. 'Information systems and user resistance: theory and practice'. *The Computer Journal*, 31(5): 398-408.

Howcroft, D., and Wilson, M. 2003. 'Paradoxes of participatory practices: the Janus role of the systems developer'. *Information & Organization* 13(1): 1-24.

Jiang, J. J., Muhanna, W. A., and Klein, G. 2000. 'User resistance and strategies for promoting acceptance across system types'. *Information and Management*, *37*(1), 25-36.

Johnstone, D., Huff, S., and Hope, B. 2006. 'IT projects: Conflict, governance, and systems thinking'. In *System Sciences, 2006. HICSS'06. Proceedings of the 39th Annual Hawaii International Conference on* Vol. 8, pp. 197b-197b. IEEE.

Kim, H-W. and Kankanhalli, A. 2009. 'Investigating user resistance to information systems implementation: a status quo bias perspective'. *MIS Quarterly*, 33(3): 567-582.

Klaus, T., Wingreen, S., and Blanton, J. E. 2007. 'Examining user resistance and management strategies in enterprise system implementations'. In *Proceedings of the 2007 ACM SIGMIS CPR conference on Computer personnel research: The global information technology workforce* pp. 55-62. ACM.

Klein, H. K., & Myers, M. D. 1999. 'A set of principles for conducting and evaluating interpretive field studies in information systems'. *MIS Quarterly*, 23(1), 67-93.

Krovi, R. 1993. 'Identifying the causes of resistance to IS implementation: A change theory perspective'. *Information and Management*, 25(6), 327-335.

Kumar, K., and Van Dissel, H. G. 1996. 'Sustainable collaboration: managing conflict and cooperation in interorganizational systems'. *MIS Quarterly*, 279-300.

Lapointe, L., and Rivard, S. 2005. 'A multilevel model of resistance to information technology implementation'. *MIS Quarterly*, 461-491.

Legare, T. 1995. "Minimizing resistance to technological change: a power and politics approach," *Information Systems Management*, *12*(4), 59-61.

Markus, M. L. 1983. 'Power, politics, and MIS implementation'. *Communications of the ACM*, *26*(6), 430-444.

Markus, M. L., and Bjørn-Andersen, N. 1987. 'Power over users: its exercise by system professionals'. *Communications of the ACM*, 30(6), 498-504.

Markus, M. L., and Robey, D. 1988. 'Information technology and organizational change: causal structure in theory and research'. *Management Science,* 34(5), 583-598.

Markus, M. L., Axline, S., Petrie, D., and Tanis, S. C. 2000. 'Learning from adopters' experiences with ERP: problems encountered and success achieved'. *Journal of Information Technology*, 15(4), 245-265.

Meissonier, R., and Houzé, E. 2010. 'Toward an 'IT Conflict-Resistance Theory': action research during IT pre-implementation'. *European Journal of Information Systems*, 19(5), 540-561.

Morozov, E. 2013. *To Save Everything, Click Here: Technology, Solutionism and the Urge to fix Problems That Don't Exist.* London: Penguin.

Polites, G.L. and Krahanna, E. 2012. 'Shacked to the status quo: the inhibiting effects of incumbent system habit, switching costs and inertia on new systems acceptance'. *MIS Quarterly*, 36(1): 21-42.

Quinn, R. E. 1976. 'Management Information Systems and resistance: towards a better understanding'. *Public Productivity Review*, 2(1): 5-19.

Rivard, S. and Lapointe, L. 2012. 'Information technology implementer's responses to user resistance: nature and effects'. *MIS Quarterly,* 36(3): 897-920.

Robey, D., Smith, L. A., and Vijayasarathy, L. R. 1993. 'Perceptions of conflict and success in information systems development projects'. *Journal of Management Information Systems*, 123-139.

Seo, D., Boonstra, A. and Offenbeek, M. 2011. 'Managing IS adoption in ambivalent groups'. *Communications of the ACM*, 54(11): 68-73.

Shang, S.S.C and Su, T. C.C. 2004. 'Managing user resistance in Enterprise Systems implementation,'. *AMCIS 2004 Proceedings,* pp. 149-153. The 10th Americas Conference eon Information Systems, New York, New York, August 2004) [Available at: http://aisel.aisnet.org/amcis2004/23, Accessed 26/03/2013]

Silva, L. 2007. 'Epistemological and theoretical challenges for studying power and politics in information systems'. *Information Systems Journal*, *17*(2), 165-183.

Silva, L., and Fulk, H. K. 2012. 'From disruptions to struggles: Theorizing power in ERP implementation projects'. *Information and Organization*, *22*(4), 227-251.

Skowron, A., Ramanna, S., and Peters, J. F. 2006. 'Conflict analysis and information systems: A rough set approach'. in *Rough Sets and Knowledge Technology* pp. 233-240. Springer Berlin Heidelberg.

Smith, H. A., and McKeen, J. D. 1992. 'Computerization and management: A study of conflict and change'. *Information and Management*, *22*(1), 53-64.

Smith, S., Winchester, D., Bunker, D., and Jaimeson, R. 2010. 'Circuits of power: a study of mandated compliance to an information systems security de jure standard in a government organization'. *MIS Quarterly*, 34(3), 463.

Somers, T. M., and Nelson, K. G. 2004. 'A taxonomy of players and activities across the ERP project life cycle'. *Information and Management*, 41(3), 257-278.

Stinchcombe, A. L. 1990. *Information and Organizations*. Berkeley CA: University of California Press.

Vann, J. L. 2004. 'Resistance to change and the language of public organizations: a look at clashing grammars in large-scale information technology projects'. *Public Organization Review*, 4(1), 47-73.

Vrhovec, S., and Rupnik, R. 2011. 'A model for resistance management in IT projects and programs'. *Electrotechnical Review*, *78*(1-2), 24-37.

Wagner, E. L. 2002a. 'Inter-connecting IS narrative research: current status and future opportunities for process-orientated IS research'. *LSE Department of Information Systems Working Paper Series* No. 105 [At: http://is2.lse.ac.uk/wp/pdf/wp105.pdf; Accessed 26/03/2013]

Wagner, E. L. 2002b. 'Interconnecting information systems narrative research: An end-to-end approach for process-oriented field studies'. *Proceedings of the IFIP TC8/WG8*, *2*, 419-435.

Wagner, E. L., and Newell, S. 2007. 'Exploring the importance of participation in the post-implementation period of an ES project: a neglected area'. *Journal of the Association for Information Systems*, 8(10), 508-524.

Webster, J. 1995. 'Networks of collaboration or conflict? Electronic data interchange and power in the supply chain'. *The Journal of Strategic Information Systems*, 4(1), 31-42.

Wen, C., Remus, U., and Mills, A. 2011. 'Understanding and addressing user resistance to IS implementation in a lean context'. *ECIS 2011 Proceedings* (Paper 210).