THE INFLUENCE OF POWER STRATEGIES IN INFORMATION SYSTEMS (IS) IMPLEMENTATION PROCESSES

Rui ROBALO
Polytechnic Institute of Santarém
(Portugal)

José António C. MOREIRA
University of Porto
(Portugal)

ABSTRACT:

This study is based on a longitudinal in-depth case study that was conducted in a Portuguese public sector organization. We investigated how the implementation processes of two information systems (IS) were influenced by power strategies, under the power dimensions proposed in Hardy's (1996) framework. The study's contributions include: an extension of this framework concerning the "power of the system"; evidence that power was exercised in a non-threatening way; and that each strategic dimension of power was interrelated to the other dimensions.

Keywords: information system, implementation process, public organization, power, power definitions.

INTRODUCTION

This paper studies the implementation processes of two information systems (IS) within Post, a Portuguese public sector organization. These processes are affected by the dynamics of power within organizations. As pointed out by Avgerou and McGrath (2007), recent work attempts to explain IS and organizational change in terms of social processes rather than as a consideration of rational techniques. We consider IS implementation processes as inherently social activities that occur within organizational settings and embody power mechanisms. Therefore, because we intend to improve both theory and practice in IS implementation processes, we take into account the multiple dynamics of power. The specific research question we address is thus "How the implementation processes of two information systems in Post were influenced by power strategies?"

For researchers and practitioners, power issues can help in understanding and explaining how and why IS implementation processes evolve in particular ways in specific organizational settings, even in situations of apparent consensus. Despite this, it appears that researchers have been mainly attracted to the study of resistance and failure when approaching those processes from a power perspective (e.g. Dhillon, 2004, 2008; Dhillon and Caldeira, 2010; Grover et al., 1988; Markus, 1983).

Although there is earlier work pointing out the advantages of using a framework based on power (e.g. Pfeffer, 1992), the concept of power continues

to have a negative connotation, which has inhibited its broader discussion and has driven researchers away from deeper study of political dynamics (Hardy, 1996). However, in a non-possessive view of power (e.g. Brass, 1992; Cendon and Jarvenpaa, 2001), it can be shared and one's power does not need to diminish if another actor's power increases. Therefore, power can be non-threatening and can have outcomes other than "*the achievement of personal or group interests*" (Cendon and Jarvenpaa, 2001: 124).

In the current study we avoid an 'a priori' negative connotation of power, considering instead that power in IS implementations can result in either negative or positive outcomes, i.e. the exercise of power can produce both dysfunctional and functional outcomes. We adopt a power definition that sees it as a force (or ability) that can be used to achieve a desired outcome (Hardy, 1996; Giddens, 1984; Salancik and Pfeffer, 1977). The ways this force is used constitute the internal politics of an organization, and make power a multi-dimensional concept.

Unfortunately, it tends not to be the case that IS researchers approach power through a multidimensional framework to have a more comprehensive understanding of the concept. They generally use the single term "power" to refer to different meanings such as authority, centralization, decision rights, participation in decision-making, influence, politics (Jasperson et al., 2002). This is inadequate, given that in those processes power can be exerted in different ways and at different levels (e.g. Dhillon et al., 2011; Hekkala and Urquhart, 2013).

Taking this into account, we consider the multidimensional perspective of power proposed by Hardy (1996) a useful framework with its four dimensions of organizational power – resources, decision-making processes, meanings, and system –, because her framework brings together different and relevant streams of the organizational power literature. It has been successfully applied in earlier studies related to IS implementation processes at intra-organizational level (e.g., Dhillon, 2004; Dhillon et al., 2011; Kolkowska and Dhillon, 2013), which have provided evidence of cases of resistance and failure. Moreover, the choice of this framework is also justified by the fact that earlier evidence in the case study data collection seemed to show that the former three dimensions of power (resources, decision-making processes, and meanings) were used in the organization to constrain the fourth dimension, the power embedded in the system. Thus, to understand the implementation of the two IS, we needed a comprehensive approach to power that enabled us to understand how different dimensions of power interacted with each other.

This study encompassed specific features. Firstly, from the very beginning of our research it seemed not to be a case of resistance and failure. However, despite an existing consensus between organizational actors in relation to the two IS implementations, power was being strategically exercised. Secondly, change processes in public sector organizational contexts tend to be more unpredictable than in private ones due to their dependence on the political nature of the decision-making processes. According to Gauld (2007), the likelihood of failure appears higher in public sector contexts than in non-public ones.

The remainder of the paper is organized as follows. In the next section, we present the literature review that guides the study, and which precedes the

description of the research method. Then, in the following two sections, the findings are presented and discussed. Conclusions and contributions for theory and practice are in the final section.

LITERATURE REVIEW: MULTIPLE DIMENSIONS OF POWER

The power concept holds several meanings. This may explain why IS literature contains multiple approaches of power. For example, different terms such as power, politics and authority have been adopted by authors in an attempt to draw a distinction between critical power meanings. Nevertheless, in their studies researchers generally use the single term "power", even though it has a different meaning for different people and in different contexts (Jasperson et al., 2002).

Classical definitions of power include those of Dahl (1957), Emerson (1962) and Pfeffer (1981). These authors see power in terms of the influence an agent has to impose on another an action that he/she would not otherwise perform, i.e. in terms of the ideas of conflict and resistance. They do not highlight the less visible characteristics of power in situations of apparent consensus, when conflict is not the basis of the underlying power relationships. However, power should also be considered as something beyond conflictual contexts (e.g. Giddens, 1976; Burns and Scapens, 2000). Conflict may emerge only if new rules challenge the existing routines and institutions and imply the existence of interests that are not fulfilled under the former. Thus, power relationships may be active even if there are no situations of conflict.

The exercise of power within an organization can be more or less visible, and can assume multiple facets or dimensions. Horton (2003) states that a significant proportion of IS research tends to expose views related to the exercise of power in its dimension of "power over resources". Hardy (1996) also points out that in managerial research power has been considered to be related to organizational resources (e.g. money, information, political access to higher echelon members). In this context, she argues that power may be exerted by some actors to alter the behaviour of others through the deployment or restriction of some key resources. This concept of power implies that one pays attention to situations where power is exercised in a more visible way.

However, alternative power approaches emerged in the literature. Bachrach and Baratz (1962) sustain that the power resource-based concept seems only to be looking at concrete acts of decision-making by specific actors, forgetting that power might be expressed not only in doing things but also in ensuring that things do not get done (non-decision-making processes). The idea that there may be something unobservable called non-decision-making was not widely accepted (e.g. Clegg, 1989).

Lukes (1974) extended the two faces of power (resources and decision-making processes) proposed by Bachrach and Baratz (1962) to a three-dimension model of power by adding a third perspective, the power over meanings. A consequence of this dimension of power is that it may be exerted to prevent conflict. As pointed out by Hardy (1996) power may be exercised to shape perceptions, cognitions and preferences so that individuals accept the "status quo", but it may also be exercised to convince people that change should take place. This means that organizational actors tend to use different meanings to

legitimize their own decisions and demands, while de-legitimizing those of others (Dhillon, 2004, Hardy, 1996).

Another view of power emerged from the works of Foucault (e.g. 1979, 1980, 1982). He conceptualizes power as a 'technique' that achieves its effects through its disciplinary character (Dhillon, 2004). To understand power one must not ignore the values, traditions, cultures, and structures of a given organizational system (Hardy, 1996). In Foucault's post-modern conception, power is exercised rather than possessed, its exercise is not viewed as a one-way process (Cendon e Jarvenpaa, 2001), and power relations are not necessarily in the form of control exercised by the prevailing authority (Avgerou and McGrath, 2007). They are multidirectional, operating top-down and also bottom-up. The emphasis on interdependence rather than on dominance and resistance means that power can be exercised in a non-threatening way, and its exercise may be directed towards benefiting the organization, instead of following the opportunistic interests of some organizational groups (Cendon e Jarvenpaa, 2001). For Foucault power relations are seen as positive and productive, and not simply negative. This perspective of power is of importance, mainly when is at stake the analysis of processes by which power is exercised within organizations.

Hardy (1996) offers a comprehensive approach to power, proposing a synthesis of some of the ideas discussed above. Her framework encompasses four dimensions of power. The first one, power over resources, is defined as the power exercised by organizational actors "*to influence decision outcomes and bring about desired behaviour through the deployment of key resources on which others depend*" (Hardy, 1996: S7). The second dimension, power over decision-making processes, encompasses the power exerted by *"dominant groups to influence outcomes by preventing subordinates from participating fully in decision-making"* (Hardy, 1996: S7). Power over meanings, the third dimension, is exercised either to influence people's perceptions, cognitions and preferences so that they will accept the "status quo", or to convince people that change should take place. In both situations, meanings are used to prevent the emergence of conflict (Hardy, 1996; Dhillon et al., 2011, Kolkowska and Dhillon, 2013). Hardy (1996) argues that the aforementioned three dimensions of power can be used to constrain the fourth dimension, the power of the system, to bring about change, and that this dimension of power is deeply embedded within the organization and is supported by the 'unconscious acceptance' of existing, prevalent organizational values, traditions, cultures, and structures. Even though the power of the system imposes strong limits on organizational actors' actions during IS implementations, they have some scope in modifying it through the mobilization of resources, processes and meanings (Dhillon, 2004; Dhillon et al., 2011). Thus, the power of the system is the backdrop against which decisions are taken over time (Hardy, 1996; Kolkowska and Dhillon, 2013).

RESEARCH METHOD

We arrived at Post in 2003, just after the decision had been made to implement the Profit and Loss (P&L) and Key Performance Indicators (KPI) systems. After obtaining preliminary evidence, we observed the corporate level impact of these information systems and noticed that the Planning and Control Office (PCO) managers were the main protagonists in their implementation

processes. Hence, we decided to study the power strategies adopted by them during these processes. There were various reasons for focusing our research on power strategies, which in this case seemed to be dense and multi-dimensional. Firstly, we noticed that the PCO managers had developed expertise regarding this kind of information systems through previous training courses. Secondly, as a corporate organizational area, the PCO seemed to hold a privileged hierarchical position within Post, which had allowed it to debate the benefits of implementing the P&L and KPI with the Board and first-line managers of the other organizational areas. Finally, it was not clear for us at that particular moment how the PCO managers would make use of power strategies in order to implement these systems.

We adopted a longitudinal in-depth case study, because this method provides detailed, rich and contextual information (Miles and Huberman, 1994; Mason, 2002). Moreover, as Abernethy and Vagnoni (2004) point out, the complexities associated with power and alternative roles of IS are best examined using in-depth case studies. In fact, these are recommended for studying contemporary and complex phenomena in management (Eisenhardt, 1989; Yin, 1994) and are particularly appropriate when the research questions begin with 'how' or 'why' (Yin, 1994), as it is our case.

The study of the implementation processes of the P&L and KPI in Post, which took place from February 2003 to July 2004, allowed us to analyze a lot of documentary data produced by the main protagonists, i.e. the PCO managers, including internal communications signed by them, by other operational managers and by members of the Board. We also conducted several interviews with the PCO managers to explore new issues and to complement or validate issues under analysis. In addition, we interviewed a consultant of Post who was involved in the implementation of other projects related to the business areas, to understand why the management consultancy firm he belonged to was not involved in the P&L and KPI implementation processes. Together the documentary data and the interviews allowed us to build up a profile of the views of the PCO managers.

To get a similar profile of the managers from the other organizational areas regarding the P&L and KPI, we conducted a total of 14 in-depth, face-to-face interviews with first and second-line managers from seven different organizational areas. We used them, along with documentary data, to understand their participation in the implementation processes of the P&L and KPI. In so doing, we considered the 'discourses' of the different organizational actors involved in these IS implementation processes (Truex et al., 2000), and not solely that of the PCO managers.

Before beginning the interview procedure, we designed an interview guideline, based on the reviewed literature and our research goals in relation to this topic, and followed the criteria established by Strauss (1987) for applying open up questions about other phenomena or other aspects of the same phenomena. The prepared guideline aimed to increase the reliability of our data by ensuring that we followed similar criteria in questioning the interviewees in each of the different sections of the interview.

We thus obtained various types of evidence from diverse sources. No relevant contradiction between the interviews and the available documentary data was found. The vast amount of evidence collected allowed us to take a

longitudinal approach to the P&L and KPI implementation processes in Post from a multi-dimensional power perspective.

The data analysis in our study was an interactive process, and was conducted in three steps (Miles and Huberman, 1994). Firstly, data collected from interviews, written documents, notes, etc., was coded and grouped according to common themes, and then categories were formed with similar themes to give order and meaning to the data collected. Secondly, data was organized and displayed in charts, graphs and other formats to identify relations in the data collected. Finally, conclusions were drawn and verified.

FIELD STUDY

An overview of the Company

Post is a large Portuguese company belonging to the public sector at the time of our study. It operated in four markets: mail; parcels and express mail; financial services; and data and documents. Mail is its most important market, with parcels and express mail ranking second, as reported in the analysed annual reports.

The company has been facing increasing competition in its main markets because of major changes that have taken place in the postal sector. Firstly, an ongoing process of deregulation has reduced the reserved business area since 2000, the year in which the European Community postal services opened to competition. Secondly, new technologies have also had a significant impact on the postal sector with the huge proliferation of email and growing use of text messaging, replacing surface mail, which has been until recently the traditional means of communication and Post's core business. However, the company has developed new technological products and services such as hybrid mail, digital certification, e-government services, e-logistics, and reverse hybrid mail.

The Boards of Post have been composed of five members that were chosen by the Portuguese Government for a three-year period. Thus, their members tended to be linked to the Portuguese Government's political 'family', and changes in the Portuguese Government had frequently led to a replacement of members of the Board. Moreover, significant changes in the Board had in turn often led to the replacement of a lot of first and second-line managers. These replacements tended to occur because first-line managers were appointed by the Board. However, our study time span, and the implementation of the P&L and KPI systems, fell in the mandate of a specific Board (July 2002-July 2005) with no change in its members.

The Planning and Control Office (PCO): its role in the organization

The PCO was (and still is) an internal organizational area of Post at the corporate level [see Appendix A]. It was organized into three broad working departments: planning, control, and information management. The three (second-line) managers of these departments and the head of the PCO had worked together for a very long time, thus ensuring stability in the office top management. Within Post, the information management department was also known as "PCO's IT nucleus", which had been its previous name. Before July

2002 each (macro) organizational area of Post had a department named "IT nucleus", but they have been closed down by the new Board. The "PCO's IT nucleus" was the exception, which continued operating under a new name.

The main (macro) organizational areas of Post had an internal Planning and Control Department (PCD). The PCDs were small areas managed by second-line managers, and each usually employed one or two staff members. One of their fundamental roles was to help interpreting data made available by the PCO, and prepare this information for their first-line managers. The PCDs were also the main counterparts of the PCO managers during the implementation processes of the P&L and KPI systems.

Since 1995 the PCO has managed an Executive Information System (EIS), which provided business information regarding costs, investments, commercial and human resources. This information has been available in various formats such as time periods, cost centres, product families, projects and organizational areas. The information update has been done monthly, and supplied online by the EIS to about three hundred people in Post, two weeks after the end of each month. Such information, which includes forecasted and actual figures, has been analysed in monthly control meetings attended by the Board and first-line managers, including the head of the PCO.

However, the PCO managers aimed to extend the existing information analysis (mainly provided by EIS). They intended to implement a P&L system to prepare income statements per business area, and a KPI system based on the balance scorecard rationale. As the PCO managers explained to us, the implementation of these two systems was needed because the company was expected to face increased competition due to the aforementioned important changes that were taking place in the postal sector. These managers believed in the usefulness of P&L and KPI systems for Post.

The IS implementation processes

At the end of January 2003, the PCO revealed the plan of both IS during a meeting with first and second-line managers of Post. In this plan the P&L was defined as a "*system which provides monthly income statements by area even for the lower levels of the organizational structure and which includes an internal transfer pricing model*". The KPI was defined as a "*system which provides a set of key performance indicators on a monthly basis, thus allowing the Board to monitor the implementation of the strategic goals of the company*". Apart from defining the scope and aims of the P&L and KPI systems, the plan also justified their needs in the increasingly competitive context, identified the team, and set the calendar for the different phases of both implementations.

In February 2003, the implementation of the P&L and KPI systems began. Both implementation processes followed a similar *modus operandi*. Making use of their cumulative expertise on such kind of IS, in a first phase the PCO managers prepared an initial (conceptual) proposal for each of the systems and sent it to the other organizational areas to collect their comments and suggestions of improvement. In the case of the P&L, the proposal included a list of potential internal transfer prices for each business area; for the KPI, the proposal contained a list of key performance indicators for each (macro) area of Post, organized into four perspectives – financial, market/customer, resources,

and processes/quality service – and linked with the strategic objectives of the company for each of these perspectives. The PCO managers proposed key performance indicators in excess, allowing the organizational areas to define their specific set.

Then, in a second phase, the organizational areas of Post analysed the PCO (conceptual) proposals, having the PCO managers worked as partners in explaining in detail the concepts they contained. There were thus intensive interactions and negotiations between business areas. In the case of the KPI, such interactions and negotiations occurred between each (macro) area of Post and the PCO managers. In both systems, the processes were facilitated by the existence of a PCD in each organizational area. These managers enabled a more fluid dialogue with the PCO managers. The processes seemed very orderly, and agreements were easily achieved, resulting in the final proposals to be approved by the Board.

In a third phase, the PCO managers and the IT area worked closely to choose the P&L and the KPI software applications. For each IS, the PCO information management department developed the technical specifications to be made available for the IT area. Then, this area, considering the technical specifications of the IS and the IT architecture of Post, selected a set of IT suppliers to develop a prototype to be analysed by managers from both the IT area and the PCO. During the overall implementation processes, the head of the PCO kept informed the top-level managers about the development stages. This means that PCO and IT managers worked more as partners than as competitors. Thus, there is evidence of peaceful implementation processes, whereby the Post managers' strong collaboration and the Board's commitment were recognized by the PCO managers. However, these processes cannot be completely understood unless one discusses the different power strategies exercised by the PCO managers through time. Next section discusses them.

DISCUSSION OF THE POWER STRATEGIES

Based on Hardy's (1996) framework, we discuss in a structured way the different power strategies adopted by the PCO managers during the implementation processes of the IS.

Power over resources

During the implementation of the systems, the PCO managers exercised their power at the level of resources. An example of this power dimension can be seen in the accumulation and usage of the expertise necessary to implement the two IS (Dhillon et al., 2011). Those managers had long endeavoured to broaden their knowledge in the concepts of both systems. Through their information management department, they had also accumulated IT expertise, which allowed them to be very active in the choice of the technological solutions. We might say that the PCO managers exerted power by drawing on their accumulated expertise.

The perception of other Post managers, including the IT managers, that PCO possessed the necessary expertise to carry out the implementation of the systems seems to be one of the reasons that led them to recognize and accept

PCO exercise of power, and explains the absence of conflict. This is an important finding of our study. It shows that the PCO used its accumulated expertise (power over resources) to work progressively the concepts underlying the systems with the other Post managers, without conflict, fostering the use of another power dimension: power over meanings. Thereafter, a successful spread of meanings reinforced the 'perceived' expertise of the PCO managers in the eyes of the other Post managers.

Power over decision-making processes

Post managers perceived that PCO managers were significantly heeded at top-level management. Despite changes in the Board, the PCO enjoyed through time a stable status in the organization, which helped to strength the position of its managers, and particularly that of its head, that kept the place since 1995. The privileged hierarchical position of the PCO seems to be partly because its managers were the supervisors of a strategic information system, EIS, that has been the main provider of information for the monthly control meetings, in which took part the members of the Board and the first-line managers, including the head of the PCO. These regular meetings were a place for PCO exercise of power over the other Post managers in relation to existing and new IS. As pointed out by Hardy (1996), organizational procedures and routines can also be used by organizational actors to bring about change, as it was done in the case of the P&L and the KPI systems.

The monthly meetings were also an opportunity for PCO intensify the interconnections with other organizational areas of Post, and influence them about the benefits of implementing the P&L and KPI systems. These interconnections and the privileged hierarchical position of the PCO can be seen as structural factors (Cendon and Jarvenpaa, 2001) that allowed this office to exercise power over decision-making processes. The outcome was an increasing ability of the PCO managers to influence the other managers, including the Board members, on the importance of implementing the new IS. In so doing, the PCO managers granted access to the financial resources they needed, and achieved the commitment of their colleagues to the dissemination of meanings related to the P&L and KPI in the entire organization. This is an interesting finding of our study. It shows that exercising power over decision-making processes also has a (positive) impact on the exercise of power over resources and meanings.

Power over meanings

On concerning the power over meanings, the PCO also exercised it with the other Post managers, including the Board members, to achieve the implementation of the P&L and KPI systems. Its strategy involved a progressive dissemination of the aims of these IS, as well as their inherent concepts. The PCO managers justified their implementation as a way of responding to the new competitive challenges the company was facing due to the ongoing changes that were taking place in the postal sector. The P&L and KPI systems were deemed to be part of the strategic information systems plan.

In this context, to exercise power over meanings with the other Post managers, those of PCO made use of discursive, interaction and non-threatening negotiation tactics emphasized by Cendon and Jarvenpaa (2001). They created an organizational climate to ensure the acceptance of the systems through discursive tactics and interaction tactics. Moreover, conscious of the need of consensus for achieving successful implementations they made use of non-threatening negotiation tactics. These were relevant for achieving a high involvement of the Post managers, and for reaching the agreements we reported in the field section, which resulted in the outcome of successful implementations.

Acting at the level of meanings, the PCO managers prevented de emergence of conflict (Hardy, 1996; Dhillon et al., 2011, Kolkowska and Dhillon, 2013) and convinced Post managers that change should take place. Thus, apart from being influenced by the other two dimensions of power discussed above, the power over meanings also influenced them.

Power of the system

It is argued in the literature (e.g. Dhillon et al., 2011) that the 'power of the system' dimension is more systemic than the other three power dimensions discussed so far, and encompasses most members in its web. During the implementation processes of the P&L and KPI systems, the Post organizational context was characterized by a large number of behaviours based on 'taken-for-granted' assumptions. In terms of information management practices, among others, the annual planning and budgeting processes, and the monthly control meetings, are examples of information management practices that has been carried out in Post based on that type of assumptions. These practices are an expression of the power of the system, and were validated by successive Boards and other organizational actors throughout the years.

However, the power of the system in Post also led to behaviours based on 'untaken-for-granted' assumptions. These behaviours arisen from existing uncertainties at the system level, which in turn had impacts on the organizational practices of Post, including those related to the information systems. As mentioned above, the Portuguese Government appointed a Board for a three-year period and its members were usually closely linked to the Government's political family, causing instability at the top-level management each time a new Government took office. Whether the new Board decided to maintain Post managers in their privileged hierarchical positions, it was partially influenced by their previous work, but this was not taken for granted by the organizational actors. Friendship and political connections were particularly important in the selection of Post managers. Thus, in Post, apart from behaviours based on 'taken-for-granted' assumptions, there was also clear evidence of behaviours based on 'untaken-for-granted' assumptions caused mainly by the frequent replacement of the Boards, which always affected its power structures. This is undoubtedly a contribution of the current study to the literature, extending Hardy's (1996) 'power of the system' conception, introducing a more dynamic and interdependent role between this power dimension and the other three dimensions of power (resources, decision-making processes and meanings) throughout time.

CONCLUSION AND CONTRIBUTIONS

This study analyses how the implementation processes of two corporate information systems in Post were influenced by power strategies. Applying the dimensions of power proposed by Hardy's (1996) framework, it enlarges our understanding of the strategies adopted by the PCO managers in designing and implementing those systems. Without a multi-dimensional power analysis, the consistency of such strategies would be difficult to understand.

This study makes several useful contributions. First, it adds a case of IS implementations where power was exercised in a non-threatening way. Hence, our finding is undoubtedly a contribution to the IS literature, that is essentially filled with cases where power and conflict go "hand in hand".

Second, this study extends Hardy's (1996) framework concerning "the power of the system" dimension. One implication of the current research is the enhancement of our understanding of this dimension beyond 'taken-for-granted' behavioural assumptions. In fact, at the system level we also identified behaviours based on 'untaken-for-granted' assumptions, extending this way the 'power of the system' dimension of Hardy's framework.

Third, this study also extends Hardy's framework by highlighting that each strategic dimension of power influences and is influenced by the other two. Despite being conceptually distinct power dimensions, resources, decision-making processes and meanings can be seen as dynamic, complementary and interdependent.

Fourth, the current study and the case it discusses adds to the scarce literature on IS implementation in southern European countries, and most especially to the literature on systems implementation in public sector organizations.

Last but not the least, the study also makes a useful contribution in driving IS managers through the different manifestations of power in an organizational setting. It provides practical insights into the way an implementation process evolves and is affected by managers' exercise of power.

Nevertheless, this study is not exempt from limitations. Probably of greatest importance, it was based on a single case study, constraining the generalization of the conclusions. However, this research approach is not uncommon in the IS literature, and its relevance has been acknowledged in prior research (e.g. Dhillon et al., 2011).[1]

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[1] For the sake of parsimony, a few appendixes available in a previous version of the current paper are not displayed. This information is available from the authors upon request.

REFERENCES

Abernethy, M. and E. Vagnoni (2004). 'Power, organization design and managerial behaviour', *Accounting, Organizations and Society*, 29, pp.207-225.

Avgerou, C. and K. McGrath (2007). 'Power, rationality, and the art of living through socio-technical change', *MIS Quarterly*, 32, pp. 295-315.

Bachrach, P. and M. S. Baratz (1962). 'Two faces of power', *American Political Science Review*, 56, pp. 947-952.

Brass, D. J. (1992). 'Power in Organizations: A Social Network Perspective'. In G. Moore and J. A. Whitt (eds.), *Research in Politics and Society: Vol. 4. The Political Consequences of Social Networks, pp.* 295-323. Greenwich, CT: JAI Press Inc.

Burns, J. and R. Scapens (2000). 'Conceptualizing management accounting change: an institutional framework', *Management Accounting Research*, 11, pp. 3-25.

Cendon, B. V. and S. L. Jarvenpaa (2001). 'The development and exercise of power by leaders of support units in implementing informational technology-based services', *Journal of Strategic Information Systems*, 10, pp. 121-158.

Clegg, S. R. (1989). *Frameworks of power*. London: Sage.

Dahl, R. (1957). 'The concept of power', *Behavioral Science*, 2, pp. 201-215.

Dhillon, G. S. (2004). 'Dimensions of power and IS implementation', *Information & Management*, 41, pp. 635-644.

Dhillon, G. S. (2008). 'Organizational competence for harnessing IT: A case study', *Information & Management*, 45, pp. 297-303.

Dhillon, G. S. and M. Caldeira (2010). 'The implementation of the *Spa Select System*: Coming to grips with the cog in the machine', *International Journal of Information Management*, 30, pp. 38-46.

Dhillon, G. S., M. Caldeira and M. Wenger (2011). 'Intentionality and power interplay in IS implementation: The case of an asset management firm', *Journal of Strategic Information Systems*, 20, pp. 438-448.

Eisenhardt, K. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.

Emerson, R. (1962). 'Power-dependence relations', *American Sociological Review*, 27, pp. 31-41.

Foucault, M. (1979). *Discipline and punish: the bird of the prison*. New York: Vintage Books.

Foucault, M. (1980). *Power/Knowledge: Selected interviews and other writings 1972-1977*. New York: Prentice Hall.

Foucault, M. (1982). 'The subject and power'. In H. L. Dreyfus and P. Rabinow (eds.), *Michel Foucault: beyond structuralism and hermeneutics*, pp. 208-226. Brighton: The Harvester Press.

Gauld, R. (2007). 'Public sector information system project failures: Lessons from a New Zealand hospital organization', *Government Information Quarterly*, 24, pp. 102-114.

Giddens, A. (1976). *New rules of sociological method: a positive critique of interpretive sociologies*. London: Hutchinson.

Giddens, A. (1984), *The constitution of society*. Cambridge: Polity Press.

Grover, V., A. Lederer and R. Sabherwal (1988). ,Recognizing the politics of MIS', *Information & Management*, 14, pp. 145-156.

Hardy, C. (1996). 'Understanding power: bringing about strategic change', *British Journal of Management*, 7, Special Issue, pp. S3-S16.

Hekkala, H. and C. Urquhart (2013). Every power struggles: Living in an IOIS project. *European Journal of Information Systems*, 22, pp. 76-94.

Horton, K. S. (2003). 'Strategy, practice, and the dynamics of power', *Journal of Business Research*, 56, pp. 121-126.

Jasperson, J., T. Carte, C. Saunders, B. Butler, H. Croes and W. Zheng, W. (2002). 'Power and information technology research: A metatriangulation review', *MIS Quarterly Review*, 26, pp. 397-459.

Kolkowska, E. and G. S. Dhillon (2013). 'Organizational power and information security rule compliance', *Computers and Security*, 33, pp. 3-11.

Lukes, S. (1974). *Power: a radical view*. London, New York: Macmillan.

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

Mason, J. (2002). *Qualitative researching* (2nd ed.). London: Sage.

Miles, M. and A. Huberman (1994). *Qualitative data analysis: an expanded sourcebook*. London: Sage.

Pfeffer, J. (1981). *Power in Organizations*. Marshfield, MA: Pitman Publishing.

Pfeffer, J. (1992). *Managing with power: politics and influence in organizations*. Boston: Harvard Business School Press.

Salancik, G. R. and J. Pfeffer (1977). 'Who gets power - and how they hold on to it: A strategic- contingency model of power', *Organizational Dynamics*, 5, pp. 3-21.

Strauss, A. (1987). *Qualitative analysis for social scientists*. Cambridge: Cambridge University Press.

Truex, D., R. Baskerville and J. Travis (2000). 'A methodical systems development: The deferred meaning of systems development methods', *Accounting, Management and Information Technologies*, 10, pp. 53-79.

Yin, R. (1994). *Case study research, design and methods*. Thousand Oaks: Sage Publications.

APPENDIX A - Main (macro) areas in the organizational structure of Post