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Resistance, Challenges to Power and the Impact of Policy in Systems Implementation

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Abstract

With the negative impact of system implementation failure, it is important to recognise the issues surrounding system selection and implementation. Inspired by the work by Markus (1983), this paper focuses on the issue of resistance towards a new system and the impact policy has on diminishing opposition. A case study exploring the resistance associated with the selection and implementation of an enterprise-wide student learning management system is provided and discussed in detail. It was discovered that the enactment of policy legitimises power, establishes discourse and limits resistance.

Keywords: Resistance, Policy, Power, System Implementation

1 INTRODUCTION

The failure of an information system in an organisation can have a devastating effect on the members of that corporation as well as its reputation in the global community. Stories of failed systems occur regularly in the media, which damage the credibility of business institutions and turn potential customers away. The costs of systems failure vary. Firstly, they include economic costs, such as investments in equipment and labour. Secondly, there are costs of missed opportunities, where a system fails to deliver on benefits promised. Finally, there are costs incurred in terms of client service or risks to society in general (Sauer, 1993).

There are many stories of failed systems implementation that have had significant consequences. Indeed, some have become the stuff of legend – tales of battles lost passed on to upcoming generations of technical warriors. For example, Goldstein (2005) describes how the FBI spent over $100 million (U.S.) on case-management software that will never be implemented in practice. An audit released in 2005 by the U.S. Department of Justice noted that the disastrous Virtual Case File project was doomed for a variety of reasons, including lack-lustre requirements analysis as well as exceedingly ambitious development schedules. Charette (2005, p. 44) itemises a "Software Hall of Shame" featuring the Ford Motor Company's abandonment of a purchasing system after deployment in 2004 as one of many development fiascos. The cost of the latter debacle: $400 million (U.S.) It is worth noting that one of the common factors leading to the collapse of a software project is cited as being stakeholder politics. By definition, politics refers to social relations involving authority or power, a theme that is central to this paper.

It is important to implement successfully a system and ensure that it is running well and that the users, both customers and employees alike, are sufficiently satisfied with the system to want to continue using it. This raises an interesting point – even if a system is successfully implemented into an organisation, how do you convince users to adopt the system? The implementation of any new system involves a change in the way business is performed, and many people do not like change. As such, they will resist using the new system (Buchanan and Badham, 1999). Krovi (1993), building on work by Markus (1983) claims that change is closely related to resistance (McKenna, 1994; Krovi, 1993; Markus, 1983). To use a metaphor derived from Newtonian mechanics: For every organisational action that precipitates a change, there exists at times an unequal and opposite reaction. This adverse reaction to a state of communal disequilibrium can possibly be interpreted as an organisation's collective emotional response to the situation at hand.

The objective of this paper is to explore the concept of resistance created by the implementation of a new system. Specifically, by exploring social interactions such as power relations and discourse setting, we are able to identify when and why resistance occurs. We will also investigate the impact policy has on system adoption and overcoming such resistance. In presenting a brief case study of an implementation, we are able to explore the impact of policy as part of the system selection and implementation process in an effort to overcome challenges to power and resistance to the new system.

2 RESISTANCE AND POLICY IN THE LITERATURE

Markus (1983) raised the issue of resistance in her paper "Power, Politics and MIS Implementation". In her paper, Markus (1983, p. 432) viewed resistance as *"a product of the interaction of system design features with the intra-organisational distribution of power, defined either objectively, in terms of horizontal or vertical power dimensions, or subjectively, in terms of symbolism."* Potential users would resist information systems if *"they cause a re-distribution of power that either conflicts with the organisational structure (objective definition) or with the interests of individuals who are likely to lose power as a result of the implementation (subjective definition)"* (Romm and Pliskin, 1999, p. 28).

Markus (1983) claimed that resistance typically falls into these categories. Krovi (1993) reproduced the structuralist construction of resistance in information systems implementation, analysing the causes of this resistance.

In the realm of information systems implementation, it is argued that within an organisation actors are both empowered and disempowered and that it is by studying the immediate, the personal and the ordinary that the various levels of resistance, empowerment and disempowerment can be recognised in the systems implementation process. (As an aside, this dichotomy could be aligned to the distinction between "right" and "wrong" in business ethics. One could perhaps reformulate the accepted wisdom of ethical practice entirely in terms of the discourse of power: A case of ethics re-imagined as dynamics?)

By adopting Foucault's (1977; 1978; 1980) notion of power relations, we are forced to pay attention to the myriad of mundane, transparent, taken-for-granted, daily routines that continually shape our thinking and behaviour, and that of others (Buchanan and Badham, 1999). As Foucault (1977; 1978; 1980) argued - and it is believed that this is germane to the realm of system implementation - these power relations are in a state of constant flux, as they are open to challenge and dispute. It is through viewing systems selection and implementation from the perspective of various stakeholders, ranging from managers through to end-users over a period of time, that we are able to appreciate the vibrant nature of power relations. Furthermore, it is through knowledge that we are able to recognise the opportunities to find these areas of dispute or appropriate points of resistance and proactively challenge and achieve power.

Foucault's (1977; 1978; 1980) perspective of power relations served to remove the obscurity of the political role in controlling and regimenting individuals, opening up the practices of challenge and resistance (Buchanan and Badham, 1999). Essentially, as Foucault (1978, p. 95) suggested, *"where there is power, there is resistance."* According to Ashforth and Mael (1998), resistance implies opposition against something, typically power and the attempt to influence or control an organisational member. They contended that power and resistance are embedded in a dynamic relationship, that one force triggers the other and vice versa. This contrasts with the classical use of resistance in Information Systems research.

According to Mitchell (2004), to overcome resistance, problematic people either need to be replaced or co-opted into the development process. Furthermore, people resist due to factors inbuilt into the system being implemented. Diligence in aspiring to software quality will reduce the levels of user resistance. Finally, resistance is a product of the interaction between personal characteristics and system characteristics. There is a greater focus on issues like organisational setting and the impact on distributions of power, or more specifically, the mismatch between existing patterns of behaviour and new patterns introduced by the system (Mitchell, 2004).

By employing greater user participation, we may be able to overcome the issues of resistance that Markus (1983) suggested and remove the structuralist imposition of that approach. The somewhat idealistic practice of "egoless programming" (Weinberg, 1999) advocates personal detachment from the code that a developer writes and a willingness to accept constructive criticism. In theory, this approach fosters the materialization of democratic teams devoid of autocratic leadership where shared creativity is the norm. The problem is that such teams cannot be imposed by an external authority. They have to surface naturally as in the case of the open source movement (Moody, 2001). Peszynski and Corbitt (2003) argue that power is more diffuse and non-systematic than Markus (1983) had argued. Peszynski and Corbitt (2003) convey the argument that power within organisations dealing in systems implementation is an emergent property that results from subjugation of one group by another, thus creating a self-perpetuating shift in the power continuum.

There is little literature exploring the use of policy in system selection and implementation, which has highlighted a significant weakness and gap in the literature. However, research by Corbitt and Thanasankit (2002, p. 42), has investigated the role of policy in e-Commerce development, highlighting the issue that concepts such as power, control and legitimacy *"affect the perceptions and*

ideology underpinning the policy, and the perceptions of its meanings of those to whom the policy is directed." As a result, policy development is essentially viewed as political and non-rational, an endeavour where emotion dominates cognition. That is, bureaucrats and elected officials play a central and complex role in the policy process and cannot be separated from politics (Portney, 1986; Nakamura and Smallwood, 1980). Rather, policy is *"influenced by pluralistic inequality associated with sectional interests, power and factions"* (Corbitt, 1995, p. 311). Prunty (1984, p. 5), further stated that policy *"serves to highlight the issues of power, control, legitimacy, privilege, equity, justice, and above all, values so embedded in the concept of policy."*

Corbitt and Thanasankit (2002) claim that power is not limited to existence. It is also related to leadership and acceptance. Peszynski and Corbitt (2003) argue that power and hegemony change and are changed. They form and reform as the context in which it is created or displayed and is recontextualised by the actors operating within it. Hegemony is existential, created by previous experiences, and influenced by current experiences. According to Gramsci (1971, cited in Strinati, 1995, p. 165), hegemony is a phenomenon whereby *"dominant groups in society, including fundamentally, but not exclusively, the ruling class, maintain their dominance by securing the 'spontaneous consent' of subordinate groups, including the working class, through the negotiated construction of a political and ideological consensus which incorporates both dominant and dominated groups."* Essentially, hegemony manifests the role of a dominant government in policy, reflecting the relationship between the stakeholders and frames the way political influences affect policy development (Corbitt and Thanasankit, 2002; Corbitt, 2000).

Power relations and hegemony, due to their existential nature are dynamic, transforming and constantly changing. We create our hegemony, discourses and power relations at the same time that we are created by them. However, Foucault's disciplinary power entirely removes the controlling relationship between the subject and the object (Thompson and McHugh, 2002). In 1791 philosopher Jeremy Bentham designed a prison known as the panopticon in which inmates would be under constant surveillance. By adopting this concept at a meta-level, disciplinary power encourages self-discipline, where prisoners would change their actions in order to comply with the watchtower. Similarly, individuals would alter their behaviour and actions in order to comply with the discourse and hegemony established, overcoming resistance and ultimately challenging the power relations in place.

In order to legitimise power, it can be argued that policy is required (Corbitt and Thanasankit, 2002). By implementing policy, those with power are able to further legitimise their position and effectively create disciplinary power, requiring the individual to comply with their policy. Hogwood and Gunn (1984, p. 13-18) confirm this by stating that policy is used *"as an expression of general purpose or desired state of affairs; as decisions of governments; as formal authorisation."* Policy essentially gives the ability to appropriate legitimacy and therefore power. Silver (1990, p. 7) confirms this by suggesting that policy is about *"relationships of communication, power, exploitation, consensus, co-operation, competition, and structures, which are formed by those relationships and which impact upon them."*

In the study, by exploring the process of system selection and implementation, we are able to examine the stages of implementation, deconstructing those stages to expose the hegemonic nature of policy, the reproduction of organisational culture, the liberation within discourse, and the nature of resistance and power. This will enable the researchers to unravel the complexity, expose intent and enrich our understanding of resistance in the systems implementation process.

3   METHODOLOGY

A qualitative approach has been adopted for this research, as the researchers wish to tell their story of the selection and implementation of an enterprise-wide student learning management system at Karori University. The ability of telling this story can be either by being a participant and reporting the story

as it unfolds, or as an observer, interviewing members of the selection and implementation team re-telling the story from the members' perspective.

Furthermore, a case study methodology was employed, enabling the researcher to get inside the organisation and conduct multiple interviews. This approach also enabled the researcher to describe the organisation from the members' point-of-view, reducing the distance between the researcher and the members of the study. By being immersed in the organisational activities, the researcher was able to gain richer information and explore the power relations created in a systems selection and implementation group, and how these power relations transform over time. Sixteen members of the systems implementation team were involved in this research out of 23 potential members. Each interview lasted between sixty and ninety minutes. The information was collected via written notes made by the researcher, and, with the permission of each member, an audiotape-recorder was used in each interview. After each interview, a transcription of the interview was made. Most interviews were in the form of, and used derivatives of, the following questions, "could you please tell me the story of the systems implementation?", "what type of role did you play in the systems implementation?", and "where there any obstacles in your way, in your position (project manager/project champion/end user) during the systems implementation process?" The questions changed to reflect the observations made of the systems implementation group.

In order to analyse the data, the researcher has adopted the metaphor of the traveller, as discussed in Kvale (1996). The researcher can then report what has been described by the members and what has been supplemented by the documents collected. The researcher is then able to reconstruct a story of the implementation of the enterprise-wide learning management system by the stories given by the members interviewed. Discourse analysis was also employed to make sense of, and analyse the interviews. According to Howarth and Stavrakakis (2000, p. 4), discourse analysis refers to *"the practice of analysing empirical raw materials and information as discursive forms."* In other words, discourse analysis puts words into work, giving them meaning, constructing perceptions and formulating understanding and ongoing courses of interaction (Gubrium and Holstein, 2000). One way of examining social relations and the role of power in a social context can be examined through social dramas (Turner, 1957) as exemplified in the conceptual approach adopted by Corbitt (1995; 1997).

The concept of social dramas maintains that a social system and the inherent social relations of people or groups establishes and re-establishes a social equilibrium (Turner, 1957). However, balances are typically disrupted through political, cultural and social challenges. As a result, social disequilibrium or imbalance occurs. Readjustments need to happen in order to restore the balance. As Turner (1957) argued, when readjustments are made "profound modifications" may occur. In other words, the new social equilibrium is rarely a replica of the old equilibrium. By viewing systems implementation as social drama, we are able to vividly observe how social movements operate in practice (Turner, 1980). According to Turner (1957, p. 161), *"the interests of certain persons or groups may have gained at the expense of others…certain relations between persons and groups may have increased in intensity, while others may have diminished."* We are essentially seeing challenging and political movements inside the social system. People, or groups object to one another, initiating a social drama. Similar to the traveller metaphor offered by Kvale (1996) for data collection, the use of social dramas is only an analogy used in this research to identify key events that occurred in the system selection and implementation process.

4 THE IMPLEMENTION OF AN ENTERPRISE-WIDE STUDENT LEARNING MANAGEMENT SYSTEM

The following case study explores the selection and implementation of an enterprise-wide student learning management system at Karori University. Like many universities, Karori University consists of multiple faculties with each faculty containing multiple schools. Prior to 2002, each faculty, and in some cases, each school, used their own system for student learning management. In 2002, the Senior

Executive of the university saw a need to have an enterprise-wide student learning management system in an attempt to create compliance and uniformity to the processes surrounding student administration. This learning management system was implemented, according to members interviewed, in order for academic staff to manage student learning by keeping track of their progress and performance across all types of training activities.

Each faculty advocated their own system as being "the" system that the rest of the university should use. Throughout the selection process, a number of key stakeholders, representatives from each school, were involved in the requirements gathering and system selection process. This enabled each school to have a representative and essentially, a voice throughout the process. A comprehensive list of potential systems was quickly limited to three systems –one currently used in the largest faculty of the university, the Faculty of Commerce and Administration, and two new systems.

Debate was held in regards to the selection of the most appropriate system. Although the Faculty of Commerce and Administration still believed that their system should be selected, a decision, based on the technological infrastructure of the university, was made which eliminated this system from selection. Further discussion was then had on which of the two systems should be selected. A final recommendation was made to the Senior Executive and this was the system that would be implemented for the entire university.

The Faculty of Commerce and Administration felt that they were being treated unfairly because their system was never considered as a solution in the selection phase to the enterprise-wide student learning management system. Rumours quickly spread across the university, as the large faculty continued to criticise the selection of the system as they believed that this was selected to gain a large contract within the university. Even throughout the implementation process, the Faculty of Commerce and Administration continually resisted the new system.

Some members of the Faculty of Commerce and Administration believed that Karori University was going to adopt a poor implementation methodology by putting all users onto the new system in one go. This turned out to be not the case. This confusion was explained by the Pro Vice-Chancellor who claimed that "*there were perpetrators around the university who spun the story that we were going to introduce the enterprise-wide student learning management system full stop, and that this was wrong project management and that we were doing everything wrong. I sent emails through to these staff members where I said, 'no, we're not doing that, we are running a pilot study of the new system in first and second semester and the summer semester of 2003,' and that's what we did.*"

Actually, it turned out that by phasing the system in via pilot studies, that the implementation group "*had good feedback and good representation from all the faculties, staff and students. It really gave us a good idea of what was going to be accepted and not accepted. I think the objections have come out in the piloting phase*" (Head of the Learning Support Group). Not only would any hardware and software 'bugs' be identified, but the Implementation Group were able to identify any user issues and objections of having to teach their unit with a basic online presence and resolve these before all units had to go online.

A significant decision was made by the Senior Executive of the university during the implementation process. In order to increase user buy-in and use of the enterprise-wide student learning management system, the Vice-Chancellor requested the Pro Vice Chancellor to write a policy requiring every school at Karori University to use the new enterprise-wide system by the beginning of the academic year in 2004.

This policy was approved by Senior Executive and then the Planning and Resources Committee of the university. The policy was then sent to the Academic Board for discussion and was approved to be implemented immediately by Academic Board in mid- 2003. The policy meant that all staff had to undertake appropriate training before the end of December 2003.

Even once the system was implemented, the Faculty of Commerce and Administration resisted attending training to use the new system, claiming that this has a significant impact on their workload.

As a result, the Faculty of Commerce and Administration was one of the last groups to be migrated across to the enterprise-wide student learning management system. The smaller faculties acquiesced with the directive of the Senior Executive. As the Pro Vice-Chancellor claimed, *"everybody complained that they didn't have the time to attend training and doing it late 2003 had an impact on staff workloads."* By the start of 2004 only 70% of the academic staff in the Faculty of Commerce and Administration had attended training on the new system, compared with over 95% in each of the other four faculties. With the removal of all other student learning management systems within the University through the implementation of policy, staff members from all faculties had no choice but to use the enterprise-wide student learning management system. As far as the Senior Executive was concerned, the new system was considered a success and resistance was minimal.

The implementation of the new system immediately forced the teaching staff to recontextualise their teaching via the new system and work out how that new system would enhance their teaching online. Groups within Karori University have had the opportunity to regroup after the implementation process and start establishing exemplar units to get a better idea of good online structures, as well as experiment with ideas to start fostering a more extended online practice. By getting more of these exemplar units established, the wider university community will see the benefits and capabilities of the enterprise-wide student learning management system and see how it will help them in their teaching methods.

5   DISCUSSION

As Foucault (1978) and Ashforth and Mael (1998) contend, power relations occur where there is resistance between actors that have the ability to influence the actions of the other. With the enactment of the decision requiring academic staff to transfer to the central system, resistance occurred as their freedom of choice in teaching and learning was challenged.

The utilisation of discourse enables members to challenge the existing power relations and in effect establish a new power relation. Ball (1990) defines discourse as being *"what can be said, and thought, and also about who can speak, when, where and with what authority."* The authority vested in being an academic had been challenged and resistance emerged. The academic staff contested this new form of authority, seemingly invested in the new student learning management system.

This leads, as Foucault (1978) and Buchanan and Badham (1999) argue, to new expressions of power, through new discourse, which operate through the re-construction of existing social and organisational routines, and through targeting change in individuals and groups, in this case, the academic staff. Enhancing the discourse of managerialism and discipline drove new policy formulation and reconstituted power through the formation of new social relations. Indeed, it can be considered that the evolution of policy is subject to the competing tribal forces of the institution for which it is initially designed to regulate. The Vice-Chancellor, through the Academic Board, was able to enact policy requiring academic staff to adopt the new student learning management system. Through compliance associated with the policy, the use of the new system became mandatory. Resistance and contestation again emerged. However, transfer of meaning based on contextual cues in this scenario was not possible given the previously weak position of having no formal statute. Academics themselves had enacted the policy requiring use of the student learning management system and requiring compliance. Hogwood and Gunn (1984) argue that policy is a method of legitimising power. In this example, policy was enacted to legitimise power vested in both the Vice-Chancellor and the Academic Board.

The academics in the university challenged the management discourse imposed through policy and directives to regain their emancipation from the control inherent in the current executive structure. The academic staff wanted to be freed from the disciplinary power imposed by the managerial regime of the Senior Executive and the Vice-Chancellor as a consequence of being forced onto one learning management system. In this case study, academic staff wanted to retain their academic authority, using

their expertise in teaching and learning. They contested policy to regain control of choice in teaching and learning.

What became apparent was that a similar discourse pattern lingered throughout the system selection and implementation process, one that acted out over different sets of issues in different social dramas. Academic staff used any opportunity to challenge the discourse of managerialism, which was the most consistent ideology influencing action across the university.

Power changed throughout this process. The Vice-Chancellor recognised that in order to change the university and its operation – in her words, to "achieve a quality agenda" – then power relations needed to be different. It was apparent that the Vice-Chancellor perceived that there was a need to change the power vested in members of the University; that there was a need to formalise that change through policy and then build in compliance. The practice of managerialism though authority, statute, policy and compliance was enshrined.

The transforming nature of power relations derives from Foucault's (1977; 1978; 1980) argument that power is non-static, fluid and exercised, rather than something that can be possessed by managers and those seeking power. In this case study, power relations did shift through changes in leadership and the practice of control through policy.

In contrast to Markus (1983), this study probed the nature of discourse that affected the implementation of a system. This showed that although there was the obvious resistance of the student learning management system, it was not due to the cognitive or attitude differences of members in the organisation. Rather, resistance was driven by contestation over ideology. Differences existed about why change in the guise of a new system was needed and about the extent and validity of its imposition in relation to compliance. This discourse analysis suggests that power directly impacts on implementation through disciplinary action through the acquisition and holding of knowledge and subsequently through subjugation of the resistors.

In terms of practice, Markus (1983, p. 437-438) argued that for successful implementation, there was a need to transform the people inside the organisation. Markus (1983, p. 437) argued that if some acceptors were moved into positions occupied by resistors, resistance amongst the divisional accounts would diminish or vanish. In this study of the student learning management system, the resistors were directly brought into the selection and implementation process. They played an active and significant role throughout the process. In the end, after twelve months of full implementation, all demands of the policy are in place. All schools use the student learning management system and there have been two rounds of compliance reporting. Despite this, there is still resistance. The political context has been subtly defused but not rendered inactive. Resistance is still driven by pre-existing discourse. In this case, the resistance diminished but not because they were replaced, but rather because their influence became an integral part of the implementation process. Rather than being consigned by default to marginal power groups, a process of inclusiveness of the resistors ensured that their political influence was diminished (cf. Danziger, 1971; 1976). There was perceived to be no need in this student learning management system case study to change the people inside the organisation.

Much of the contestation and debate is reflective at the obvious level to the existence of resistance. Ashforth and Mael (1998), McKenna (1994), Krovi (1993), and Markus (1983) have argued that change is closely related to resistance. What was experienced during the selection and implementation of the student learning management system was in essence, resistance. However, this resistance was only the obvious aspect of the emerging power relations in the organisation. This resistance reflected a deeper discourse over challenges to the discourse of academic authority and intellectualism. Foucault (1978) suggests that power emerges where there is resistance. However, it is not the front stage issues of power with all their overt theatricality that are of primary interest in this scenario. Instead, it is the scrutiny of the emerging discourse that reveals the subtle role of power and politics in influencing the system selection and implementation process. This case study has highlighted the impact that this can have. However like all case studies the extent to which this level of theorising can be universally applied has to be questioned.

6   CONCLUSION

The central concern of this study has been to identify the role of power and politics in systems implementation. A non-structuralist view of power as both an obvious and hidden concept has provided the researcher a lens through which the researchers can observe the selection and implementation of an enterprise-wide learning management system. The framework aimed to identify the obvious process of system selection implementation, and then deconstruct that process to expose the hegemonic nature of policy, the reproduction of organisational culture, the emancipation within discourse, and the nature of resistance and power relations. A post-structuralist, critical case study of the selection and implementation of an enterprise-wide student learning management system at Karori University was presented and analysed using social dramas to distinguish between the front stage issues of power and the hidden discourses underpinning the front stage dramas.

The key findings from this study have indicated that the system selection and implementation works at two levels. The low level is the selection and implementation process, which operates for the period of the project. The high level is the arena of power and politics, which runs simultaneously to the selection and implementation process. Challenges for power are acted out in the front stage via public forums between various actors. The social dramas, as they have been described here, are superfluous to the discourse underpinning the front stage. This discourse maintains a degree of constancy throughout the system selection and implementation process and its myriad facets are exposed through various social dramas. Furthermore, the enactment of policy legitimises power and establishes the discourse thus limiting resistance.

Politics in the systems implementation process involves changing power relations. These power relations are created through the use of discourse. Discourse represents meaning and social relationships, forming both subjectivity and power relations. Discourses are also the practices of talk, text and argument that continuously form that which actors speak. The challenge to discourse typically emerges as resistance to the new system. Members of an organisation oppose change and will attempt to resist the new system by a series of social dramas. It is the recognition of the human factors and more importantly the rich view of power and politics in system selection implementation, which is needed to improve the systems implementation process.

The epistemology inherent in information systems research of the positivist tradition has a tendency to represent only the obvious with often questionable ecological validity. The above case study identified the hidden and unspoken discourse, the multi-layered nuances that identify who can say what to who and how. Discourse exposed threats to the individual's volition within the often labyrinthine configuration of an organisation. Understanding discourse enables the researchers to discover the richness of the complexities involved with the system selection and implementation process. "Embrace change" is the overarching motto of extreme programming, a methodology that fosters agile processes of systems development (Beck, 2000). Within the context of this paper's argument, perhaps the systems developer should also embrace complexity? This study uncovered an understanding of systems implementation, which suggests that the obvious processes evident in the taxonomy of stages is, on the one hand, determined by the requirements of the information technology artefact, but on the other hand, is bounded by the control and power vested in organisational management that is informed by discourse, historically created either externally to or internally within the institution.

The outcomes of this study have identified some implications for practice where the current research can illuminate the human issues involved, specifically in terms of the power and politics prevalent in system selection and implementation. It should be noted however, that the results of this study are not to provide a solution to the power and politics involved in systems implementation, but to recognise their important role in selecting and implementing a system.

As identified by authors such as Kling (1980), Markus (1983), Krovi (1993), Ashforth and Mael (1998) and Buchanen and Badham (1999), resistance to the adoption of a new system is the key contributor to struggles for the exercise of power and potentially a reason for system failure. The

enactment of policy forces users to adopt the new system, eliminating their choice from using another system, or resisting the system altogether. In other words, this research informs members of systems implementation projects that to ensure the system is utilised in an organisation, then policy needs to be enacted, requiring all users to adopt that particular system.

This study explored the role of power and politics in system selection and implementation. The current study could be extended to investigate the role of power and politics in other phases of the software engineering process. These phases include the requirements engineering phase, system design, negotiations with stakeholders, and post-implementation. Research into these phases of systems implementation would facilitate the identification of any emergent discourse structures. Research into the other phases of systems implementation also has the potential to uncover greater detail, bringing a deeper, more richly textured understanding of the social issues of power and politics in each phase.

The final promising area for future research is to explore the generic role of discourse in system selection and implementation. Little research has explored discourse in information systems per se. Consequently, its role and impact in the greater scheme of things is something of a mystery. However, we know from management systems that discourse plays a role in the way organisations operate. It is believed that we need to understand this in information systems. This study has highlighted that discourse does clearly inform process. We need to know more to enrich our understanding.

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