



Impact of group dynamics on eservice implementation

A qualitative analysis of Australian public sector organisational change

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Abstract

Purpose – The purpose of this article is to re-appraise the significance of Lewin's group dynamics theory empirically in the context of technology related change in local government.

Design/methodology/approach – The paper examines qualitatively the change management processes in the five city councils selected for this study that have developed eservices. A total of 23 face-to-face, semi-structured interviews were conducted with key managers of participating city councils.

Findings – The present study finds that participating Australian city councils are experiencing some degree of disconfirmation of functions, while some participating Australian city councils still maintain a quasi-stationary equilibrium state. There are some challenges in terms of inter-department integration and empowering business units to demonstrate explicit ownership of Eservices adoption. Empirical evidence presented in this study supports Lewin's argument that the main focus of change should be on group behaviour rather than individual behaviour.

Research limitations/implications – This study covers five organizations that are from the same geographical proximity and metropolitan area. The findings are limited to government organisations.

Practical implications – The findings of this study would be useful for facilitating technology oriented change in public sector organisations.

Originality/value – This paper reinforces Lewin's argument that to understand change and the individual in the changing organisation, it is necessary to identify, plot, and establish the dynamics of the group. Some insights are provided regarding the complexity of group dynamics and the impact they have when implementing organisation wide-change.

Keywords Change management, Group dynamics, Eservice, Australian local government, Public sector organizations, Organizational change, E-government, Australia

Paper type Research paper



Introduction

Successful organisations, operating in changing environments, are required to have competency in managing organisational change (Burnes, 2004b). Organisations experience change as an ever present feature in their life at both operational and strategic level (Burnes, 2004a, b). Organisations identify their future strategy and then often go through the change management process to achieve that strategy. As a result, organisational change cannot be separated from organisational strategy (Burnes,

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2004a, b). Departmental and operational changes can be viewed as mutually continuous changes (Burnes, 2004a, b). Strategic changes are often incremental changes which are concerned with organisation-wide strategies with a need to constantly adapt these to the demands of both the external and internal environment (Burnes, 2004a, b). Technology is often credited as the driving force of change in business and in society (Becker, 2010). However, only a few organisational change efforts achieve success (Kotter, 1995). Around 70 per cent of all change programs initiated report a failure of the change effort (Balogun and Hope Hailey, 2004; Becker, 2010). A lack of a valid framework to guide the implementation and management of organisational change is another reason for this poor success rate of change initiatives (Burnes, 2004a, b). Burnes (2004a, b) criticises current change management frameworks as being a wide range of contradictory and confusing theories and approaches. With only few exceptions, practice and theory are mostly supported by unchallenged assumptions about the nature of contemporary organisational change management (Doyle, 2002). Edmonstone (1995) argues that many of the change processes have been subject to fundamental flaws, preventing the successful management of change. Moreover, top-down programmatic change often fails to achieve success since directive approaches to change are ineffective in most situations (Higgs and Rowland, 2005). Much of change management research focuses on explaining the dynamics and effects of time, process, discontinuity, and context on the change process (Pettigrew *et al.*, 2001). It is important to note that organisations increasingly rely on their employees to adapt to change in order to cope with a progressively turbulent economic, technological, and social environment (Ben-Gal and Tzafrir, 2011).

An objective of the Australian government is to transform government services from a simple online presence to enable citizens to access services electronically, at all hours (National Office for the Information Economy, 2004). Since 2001, local governments have started to expand their role in eService with considerable financial support of the Federal government (O'Toole, 2007; Macdonald, 2001). Initial attempts provided mixed results, with large variations from council to council, and between the state systems in Australia (O'Toole, 2007). The Australian government sector has experience redesigning organisational boundaries or hierarchical structures while implementing eService (Teicher and Dow, 2002). Hierarchical and formalised structures of the government are not as responsive as the flatter and flexible structures typically found in the private sector (Clark, 2003). Government offices are often criticised for being conservative entities that are slower to adopt technology, or to adopt new initiatives, compared to commercial operators (Davison *et al.*, 2005; Marche and McNiven, 2003). Governments has an image of being a slow-moving bureaucracy, unwilling or unable to change and lagging behind the private sector in its use of new technology (Davison *et al.*, 2005). Previous poor experiences with information technology projects have led to a poor information technology culture for many government organisations (Margetts and Dunleavy, n.d.). Employees in government organisations are often likely to view possible eService developments with extreme suspicion and consider the safest response is to ignore them (Margetts and Dunleavy, n.d.).

Organisational change gurus still share common ideas that were first advanced by Lewin's theoretical framework (McCabe, 2010). Since the early 1990, public sector change has been inevitable due to economic, institutional, political, and ideological

pressures (Azzone and Palermo, 2011). Public sector reform in Australia was the central of focus since 1983 (Mascarenhas, 1999) Although partnership between public, private and not-for-profit sector in delivering public services has a long history in Australia, a sense of “antagonism” and “distrust” among this trilogy are common (Butlin *et al.*, 1982; Quiggin, 1999; Earles and Moon, 2000; Lyons, 2003; Keast and Brown, 2007, p. 2). Understanding the nature and practices of relationships involving multiple groups during a change in the Australian government sector is still much unexplored (Keast and Brown, 2007). Carless and Paola (2000) in a study of work teams in the Australian public sector, it was found that individuals at the work place do not distinguish between individual and group level task cohesion. Work group performance in the Australian public sector is significantly influence by commitment to the task rather than the social aspect of cohesion (Carless and Paola, 2000). Shared commitment to group goals resulted in efficient, effective and better customer services in the Australian public sector (Carless and Paola, 2000). The purpose of this research is to investigate the impact of group dynamics on change and how eService related change management is affected in the Australian local government. Lewin’s (1951) planned approach to change is an appropriate way to explain organisations who implement incremental changes, such as eService implementation in City Councils (French and Bell, 1995; Burnes, 2004b). Lewin’s (1951) models are highly generic and researchers argue that the relationship between eService and its consequences are very complex, emergent, and context-dependent (Robey and Holmström, 2001; Robey and Sahay, 1996). The aim of this article is to re-appraise Lewin’s concept of group dynamics empirically in the context of managing technology related change in local government. The article begins by describing main elements of the theoretical works of Kurt Lewin (1951) that focus on group dynamics. It then moves on to explain the context of local government in Australia and the research methodology adopted for this research. This is followed by a presentation of results of interviews undertaken. The results are analysed using the framework of Cartwright’s (1951) research for achieving change in people using Group Dynamic Theory. The article concludes by arguing that understanding the dynamics of group behaviour is a prerequisite to individual and organisational change.

Literature review

The theoretical works of Kurt Lewin have dominated the theory and practice of change management literature for over 50 years (Burnes, 2004a). Although Lewin is mostly known for the 3-Step model, his Planned Approach to Change includes Field theory; Group Dynamics; Action Research; and the 3-Step model (Burnes, 2004a; Cummings and Huse, 1989). The key focus of Field Theory and Group Dynamics are the analysis and understanding of the process of social group formation, and motivation (Burnes, 2004a). Although Kurt Lewin’s work is often considered as out-dated (Burnes, 2000; Dawson, 1994; Dent and Goldberg, 1999; Hatch, 1997), in today’s turbulent and changing world, one might expect Lewin’s pioneering work on change to be seized on with gratitude, especially given the high failure rate of many change programmes (Kotter, 1996; Stickland, 1998).

Probably among all the works of Lewin, Field Theory is the least understood and applied in the research arena (Burnes, 2004a). Unfortunately, with the death of Lewin, Field Theory has disappeared without appreciating its value as a vehicle for

understanding and changing group behaviour (Burnes, 2004a; Back, 1992; Gold, 1992; Hendry, 1996). In Field Theory, Lewin (1974b) argues that individual behaviour is the function of the group environment referred to as the “field”. In an attempt to explain that group environment, Lewin proposes a theory of Group Dynamics. Group Dynamics refers to the forces in the group that shape the behaviour of its members (Allport, 1948; Bargal and Bar, 1992). The theory of group dynamics was developed to address two main questions; “what is it about the nature and characteristics of a particular group which causes it to respond (behave) as it does to the forces which impinge on it, and how can these forces be changed in order to elicit a more desirable form of behaviour?” (Burnes, 2004a, p. 982). According to group dynamic theory, group behaviour should be the main focus of change instead of individual behaviour (Dent and Goldberg, 1999). While many researchers argue that behavioural change is a function of individual and the environment, Lewin (1947) believes that the environment modifies individual behaviour. Therefore, understanding the forces of the “field” should be the focus of change rather than the individual (Burnes, 2004a, b). Lewin (1947) argues that the individual in isolation is constrained by group pressures to conform. So therefore, focusing on individual behaviour would be wasteful (Burnes, 2004a). Lewin’s contribution to explaining individual and group behaviour during the change process is still relevant (Burnes, 2004a). Lewin (1947) argues that group behaviour can be understood by appreciating the totality and complexity of the situation in which the behaviour takes place (Burnes, 2004a; Back, 1992). Lewin (1943, 1947) and maintains that individual behaviour is a function of the group environment or “field” which is affected when any modification in group structure arises from changes in certain conditions or forces. Lewin (1947) argues that in order to understand individual, group and organisation behaviour and to manage change, it is important to identify, plot and establish the forces that influence change. An advocate of Group Dynamics, Cartwright (1951) has prescribed eight principles to facilitate scientific understanding of groups in changing situation. Cartwright’s (1951) first two principles address significance of group belongingness and the nature of influence among group members. In the third and fourth principles he argues that influence will be stronger if the group is attractive to its members and members feel prestigious within the group. In the fifth and sixth principles he cautions that the focus of change should not be on the individual rather it should be on the group. Therefore, in the last two principles, Cartwright (1951) advises that all the information relating to a change should be communicated among all group members and any adjustment measurements should targeted to all relevant levels of people being affected by the change (see Table I). He agrees with Lewin that the group should be seen as a source of influence over its member, and the group itself should be the target of change (Cartwright, 1951). Therefore, the focus of the change must be on the behaviour of the group, concentrating on factors such as group norms, roles, interactions, and socialisation processes (Lewin, 1947; Burnes, 2004a, b).

The context: local government and eService expectations

Local government (also referred to as City Councils) can be seen as a unique form of organisations that are increasingly adopting private sector practices to increase efficiency (Marshall, 1997). More than 80 per cent of the transactions that Australian residents have with government take place at the local government level (Shackleton

Cartwright's (1951)	Cartwright's (1951) principles	Relevant nodes	Critical factor(s) with examples
Group pressure needs to conform/ focus on individual behavior in isolation is fruitless	Principle No. 5. Efforts to change individuals or subparts of a group which, if successful, would have the result of making them deviate from the norms of the group will encounter strong resistance	Influence of internal or external working group	Decision taken by a committee representative from each business unit is easy to implement. To talk about the success of one project, respondent ⁵ said, "Success was due to the combination of an internal and external team. Internal team had partnership with software suppliers"
Group structure/interdependence	Principle No. 1. If the group is to be used effectively as a medium of change, those people who are to be changed and those who are to exert influence for change must have a strong sense of belonging to the same group. Principle No. 2. The more attractive the group is to members the greater is the influence that the group can exert on its members	Interdependence on business unit role	Business unit must understand the benefits of new system. Needs to create a sense of ownership. Respondent ²² suggests that, "If we want to have a centralized system, we will need to overcome the individual ownership"
Group norms	Principle No. 3. In attempts to change attitudes, values, or behavior, the more relevant they are to the basis of attraction to the group, the greater will be the influence that the group can exert on them. Principle No. 4. The greater the prestige of a group member in the eyes of other members, the greater the influence he can exert	Relationship between IT unit and other business units	IT must have clear strategy about their role. Need to reduce gap between IT capacity and other business unit's ambition. Respondent ⁶ said, "People don't take ownership because they haven't been involved from the beginning. They all wait for somebody else to check or an expert to come and do it"

(continued)

Table I.
Conceptual mapping of
group dynamics

Table I.

Cartwright's (1951)	Cartwright's (1951) principles	Relevant nodes	Critical factor(s) with examples
Group roles	Principle No. 8. Changes in one part of a group produce strain in other related parts which can be reduced only by eliminating the change or by bringing about readjustments in the related parts	Role of vendor	Capacity of the vendor is crucial to determine level of eService sophistication. Vendor can influence to implement updated eServices. Respondent15 comments, "There are only two to three vendors in the market for local government. So if they don't move with the technology, local councils couldn't move as well"
Interaction	Principle No. 7. Information relating to the need for change, plans for change, and consequences of change must be shared by all relevant people in the group	Significance of process integration among business units	Need to solve current situation where most of the intra group information systems are not integrated. As respondent19 notes, "It is interesting that one business unit often doesn't realise how it interacts with the other business units."
Socialisation process/members in the change process should be engaged and committed	Principle No. 6. Strong pressure for changes in the group can be established by creating a shared perception by members of the need for change, thus making the source of pressure for change lie within the group	Impact of unsupported business unit	Ownership of the project should be made clear and it needs a home to be supported on a continuous basis. Respondent1 explains, "I personally found the business units that will be affected by the project (a specific project) were quite reluctant to adopt the technology"

et al., 2004). The Local government provides a wide variety of services including public services, public order and safety, education, welfare, housing and community amenities, recreational and cultural services (McNeill, 1997). Each City Council's operation is divided into ten to 15 departments called business units that are responsible for respective services. Examples of typical business units in a council are financial services, health and age services, information technology department, development services, local law department, park and garden, youth and family services, etc. Each business unit head is called manager who reports to the directors. Directors report to the CEO.

Research methodology

The current study adopts qualitative methodology in order to gain an in-depth understanding of how variables relating to employee's attitudes towards eServices interact with other features essential for their functioning in the local government context. The most commonly adopted source of information in case study methodology is interviewing participants (Holstein and Gubrium, 1997; Miller and Glassner, 1997; Mason, 1996; Yin, 1994). In-depth interviews as used in this study tend to yield a detailed, rich and holistic understanding of people's opinions, aspirations, attitudes, feelings, emotions and experiences (Holstein and Gubrium, 1997; Mason, 1996; Patton, 1987).

Five City Councils in the Melbourne metropolitan area were selected based on the profile of their community, budget, financial and infrastructural capacity. Particular attention was given to ensuring a diverse range of Councils, particularly with respect to eService development.

The sample should be as heterogeneous as possible and relevant to the subject being explored in qualitative research (Dick, 1990). Hence, purposeful rather than random sampling is more appropriate for qualitative research (Patton, 1990). This study uses purposeful sampling to identify interviewees. The sample should be as heterogeneous as possible and relevant to the subject being explored in qualitative research (Dick, 1990). Hence, purposeful rather than random sampling is more appropriate for qualitative research (Patton, 1990). A total of 23 face-to-face, semi-structured interviews were conducted over a period of three months from April to June 2008 in five city councils. Initially, a small number of interviewees were selected based on their position in the organisational hierarchy and their role within the organisation. Interviewees were asked to identify any other individuals that would be relevant to the provision of eServices in the council. A "snowball" sampling technique is appropriate for this research, as it is concerns a small number of specialised people who are knowledgeable in the area of eServices (Aasker *et al.*, 2001; Neuman, 2000). Each city council allocated a person to be responsible for this project, who then organised the interviews with relevant staff.

Research methodology

To ensure a comprehensive understanding of the issues around eServices development, interviewees (respondents) comprised Directors (or CEOs), managers, team leaders and employees (officers) of City Councils. These people were selected on the basis that they could be viewed as potential "strategic leaders" in fostering the change process through a joint consultation between the researcher(s) and respective Council authorities. All interviews were conducted in person at the interviewee's workplace. The focus of

semi-structured interview questions was the identification of processes that were developed to facilitate the introduction of eServices in the city councils. These questions cover issues such as review of task process, how some particular services were identified for eServices, was it a part of general organisational change, was it part of the integrated process, what new technical structure is to be introduced (IT department), were any changes in the relationship of technical structure to other elements of the structure, was there a creation of internal/external working group for eService development or implementation, how vendor's played a role in eService implementation, what was the impact on business units that were not supporting eServices.

Interviews were, on average, 40 minutes in duration. All interviews were recorded using digital media with the consent of the interviewees and were subsequently transcribed. Interviewees had the option to review their transcripts before being processed for data analysis to promote accuracy and cross-validation. Interviewees were aged between 25 to 60 years of age. Respondents' experience working with City Councils (including other Councils) ranged from seven to 31 years.

Table II presents the background of the respondents in terms of their organisational position.

To ensure anonymity of the respondents, all transcripts were anonymised. Each interviewee is referred to as *Respondent* and assigned a number from one to 23. The transcripts were analysed using thematic content analysis, to identify the key barriers to adopting eServices in local government identified by respondents. NVivo 8.0 is used to aid the analysis. NVivo offers a structured environment to facilitate the analysis of qualitative data, for instance, open-ended survey data, interview or focus group

Identifier	Position in organisation
Respondent1	IT manager
Respondent2	eServices coordinator
Respondent3	Communication and research manager
Respondent4	Human resource manager
Respondent5	Internal audit manager
Respondent6	Unit manager, citizen services
Respondent7	Governance and community relation manager
Respondent8	IT manager
Respondent9	Organisation development manager
Respondent10	Web site and community information officer
Respondent11	Customer service coordinator
Respondent12	Organisational development research officer
Respondent13	Customer service manager
Respondent14	Human resource manager
Respondent15	Business Analyst team leader
Respondent16	eServices coordinator
Respondent17	Infrastructure and technology director
Respondent18	Technology solution and development team leader
Respondent19	IT infrastructure coordinator
Respondent20	Finance manager
Respondent21	Customer service coordinator
Respondent22	IT manager
Respondent23	Communication coordinator

Table II.
Background of
respondents

transcripts or documents. The software allows the researcher to code the text into themes or categories (called nodes) from text documents and generates “tree nodes” (a hierarchical node structure) for data display. The hierarchical nodes can have major themes called “parent nodes” with several sub-themes in support called “child nodes”. The coding framework may be established as an *a priori* or can be created concomitantly with textual analysis. Some nodes are added at the second stage.

Results: identified issues

This section reports the most common group related issues identified by staff in adopting eServices in City Councils. Key issues at the organisational level effecting eService implementation in City Councils are interdependence on business unit role, significance of process integration among business units, influence of internal or external working group, relationship between IT unit and other business units, role of vendors, and impact of unsupported business unit.

Table III shows that the most important group issue is the interdependence on business unit role with 65 per cent of respondents highlighting this issue. The second most important group issue is the influence of an internal or external working group which was mentioned by 48 per cent of respondents. Although the interview was on eService implementation, the role of IT department seems to be comparatively less significance according to the respondents.

Table I shows the conceptual mapping between the key attributes of Lewin’s Group Dynamic theory and the findings of this study. For better understanding of the application of Group Dynamic theory, the principles of Cartwright (1951) for achieving change in people have also been mapped. The underline assumptions between these relationships have been presented in the subsequent results section.

Interdependence on business units

A City Council’s operation is typically divided among 15 to 20 functional departments, called business units. Each business unit is responsible for managing and improving their areas of operation. A council’s eServices are basically the accumulation of services provided by each individual business unit. Of respondents 65 per cent considered the role of individual businesses as vital for eServices implementation.

Even in the case where the IT department is responsible for managing eServices, they have to rely on the relevant business unit for any particular service oriented change. As Respondent1, a manager in IT said, We depend heavily on the key users,

SL	Topic	Number of respondents	%
1.	Interdependence on business unit role	15	65
2	Significance of process integration among business units	10	43
3	Influence of internal or external working group	11	48
4	Relationship between IT unit and other business units	6	26
5	Role of vendors	9	40
6	Impact of unsupported business unit	10	43

Table III.
Key issues discussed during the interviewees and associated frequency

like different departments, that give services to the community. What we try to do is to share ownership of the system...

An IT department requires approval from the relevant business unit for any eServices implementation (Respondent1). Respondent1 adds that a business unit needs to have the demonstration of any new technology-oriented services to understand their benefit.

Once a business unit becomes convinced of the benefits of a new system, then it becomes easier to elicit co-operation for smoother implementation (Respondent22). One of the participating City Councils hired business analysts and assigned them to each business unit. Those business analysts document processes and identify processes that require improvement and worked with the managers or supervisors of the relevant business unit (Respondent16). The IT manager from another City Council said that, IT people are just to support the business unit. The IT can't make decisions for the business process. It is the business unit that should take the decision (Respondent22).

Respondent10 emphasises the need for a group of people from all the functional areas to drive eServices. An IT infrastructure coordinator explains, We need support from the business unit so that we can make sure we are capturing everything and nothing is left out (Respondent19).

Cartwright's (1951, p. 62) first principles also suggest that if the group is to be used effectively as a medium of change, those people who are to be changed and those who are to exert influence for change must have a strong sense of belonging to the same group.

Respondent19 highlights several cases where business units came up with their own proposal, such as online tender information, Human Resource job information, local address map, community consultations. All of these initiatives were driven by the respective business unit. Respondent8 (an IT manager) observes that when an individual is recruited from a relevant department and given ownership of the change process, management of change becomes more efficient. Cartwright's (1951, p. 63) second principles also confirm that the more attractive the group is to members the greater is the influence that the group can exert on its members.

Respondent18 mentions that they had several consultation processes with each of the relevant business units during the implementation of online payment systems. Respondent1 adds that other City Councils' eServices are a great tool to convince business units of the benefits of eServices adoption. Respondent13 considers that there is a need for a particular strategy to obtain commitment from each of the business units. Respondent23 considers that highlighting the benefits of eServices will motivate people from the relevant business unit to adopt eServices. Further, business units should be involved from the beginning of the process to ensure a sense of ownership. Sharing responsibilities, listening to their issues, consulting with them and receiving input are some of the ways to generate ownership among business units [Respondent23]. Respondent7 considers talking to the people and getting them committed from the outset to build ownership among the business units. Respondent7 gave an example of their current web administration system, where each department is responsible for managing their own section of web content. This respondent states ownership for eServices can also be achieved in the same manner, where each of the managers will have the responsibilities for their respective department's eServices.

A human resources manager of a City Council said, "I think when it comes to eServices in the HR department, the HR manager and the employees in that department should drive it" (Respondent14). This respondent also notes that, from the idea generation to convincing higher authority for funding and buying in officers should be the responsibility of the business unit's manager (Respondent14). Respondent4 considers that the resources required for eServices should come from the relevant business unit. This respondent adds that the benefits are twofold: firstly, the business unit has local knowledge; and secondly, it creates a sense of ownership among the relevant business unit. Another important issue is an interaction between business units. There are many instances where the provision of eServices involves multiple business units. In those cases, the interaction between business units is essential for successful eServices implementation. For example, the land information certificate has an effect on the local law and finance business units (Respondent16). Respondent17 said that the roles and responsibilities among the relevant business units are not always clear. As respondent19 notes, "It is interesting that one business unit often doesn't realise how it interacts with the other business units". Respondent7 said that internal awareness about eServices would result in joint grant applications, where the relevant business units jointly apply for funding.

Significance of process integration among business units

The integration of relevant processes is essential for efficient eServices provision. City Councils are using multiple databases and applications software across business units. This section addresses the degree of the integration among the various information systems within a City Council. Nearly half of the respondents emphasise the importance of process integration for eServices implementation.

Respondents report that most of the information systems within the council are not integrated. Respondent1 complains that, "We have different data warehouses but they do not communicate to each other". Respondent22 suggests that, "If we want to have a centralized system, we will need to overcome the individual ownership." Respondent3 highlights that some systems in the council are storing the same information, but are not linked. This isolation results in overall loss in information efficiency. This creates the question of whether all the business units involved in a transaction are aware of each others information requirements (Respondent20). This situation is contradictory with Cartwright's (1951, p. 64) seventh principle that is information relating to the need for change, plans for change, and consequences of change must be shared by all relevant people in the group. However, some respondents mention that councils are currently working towards process integration. Respondent1 said the council is planning to have a centralized knowledge database within the next five years. Respondent10 also discussed a plan to integrate the record management system with the customer management system in the next two years. Respondent15 said, "We are looking at how cross business units' services can be transferred into eServices. A lot of work has been done internally to align processes and evaluations of the process as well". Respondent2 suggests there are plans to integrate the payment system and content management system. This council is working towards building an interactive web-based knowledge database for their customers. Respondent8 said that they have undertaken a two-stage process for integration – the first stage is centred on the financial system and after that they will focus on business systems.

Influence of internal or external working group

An increasing number of eService projects involve both internal and external clients (Heeks, 2006). The key issue discussed in this section concerns the role of the internal and external teams in a change process to implement eServices. Cartwright's (1951, p. 63) fifth principle suggests that efforts to change individuals or subparts of a group which, if successful, would have the result of making them deviate from the norms of the group will encounter strong resistance. The process management for eServices implementation is different for each City Council. Nearly half of the respondents highlight the issues of internal or external teams working for any eServices implementation.

Respondent1 reveals that they have used external consultants and surveys among people to identify processes that need to be changed. Respondent10 said that they often have one-to-one meetings to identify issues concerned with eServices. However, this respondent considers a formal working committee to improve eServices would be more appropriate. Respondent11 agrees, noting that the council does not have any formal committee concerned with eServices. However, they used the online discussion forum for idea generation, where participation is voluntary. Respondent16 mentions a committee used to be responsible for the eServices concept across all City Councils in Australia in 2006. This respondent adds that they have a special interest group for eServices improvement. Respondent17 confirms that they have a unit with business analysts that works with the IT department and the relevant business unit to identify and implement eServices. Respondent19 reports that they had a group called eAction which had a lot of success in their council in promoting eServices concepts. The previous IT manager in that council had started a committee called the Strategic Review Committee which used to invite people to present eServices business cases. This committee supported promising cases and promote such cases to the senior management for funding allocation. Respondent20, who works in the same council, also thinks that the committee was quite useful in promoting idea generation. Respondent4 states that the City Council uses an *ad hoc* team formed for specific project accomplishment. This *ad hoc* team have some dedicated staff (for up to 12 months) and some shared staff with other business units. Respondent5 mentions that the vendors (software suppliers) play an important role in the *ad hoc* project team. Respondent2 notes that they have a Project and Program Board involving the CEO and senior executives working to implement eServices concepts. Respondent22 adds that most of the key stakeholders across different business units are involved in the IT Steering Committee. The City Council allocates funding for the projects based on this Committee's recommendation. However, the relevant business unit contributes any additional funding.

Relationship between IT unit and other business units

This section investigates other business units' perceptions about the role of IT in adopting eServices. Of the respondents 26 per cent mention the relationship that prevails between IT departments and other business units.

Respondent1 (IT manager) said that IT was viewed as having sole responsibility for implementing technology-oriented projects in the past. However, they have undergone change now where the information technology department has started to share responsibilities with related business units. The IT unit often works in collaboration

with business units for any specific applications. This is consistent with Cartwright (1951, p. 63) fourth principle that the greater the prestige of a group member in the eyes of other members, the greater the influence he can exert. Respondent10 suggests that the information technology unit should have a clear strategy about their role in adopting eServices. This strategy should outline each other's ownership of eServices development. Lack of a clear strategy often leads to a situation where initiatives are driven by opportunities rather than agendas (Respondent10). Respondent10 thinks that the IT framework can help to reduce the gap between IT and other business units. Respondent16 presents an instance where the gap between the IT capacity and business unit's ambition was the reason for project failure. There is often a problem of role confusion and unclear role responsibility (Respondent6). Respondent6 illustrates a situation where the City Council had changed a system. However, after three years of implementation, the licence of the new system expired and was not working properly. This respondent complains that no one had checked on this issue. In this respondent's opinion, this confusion was a result of role confusion. Respondent6 said, People don't take ownership because they haven't been involved from the beginning. They all wait for somebody else to check or an expert to come and do it.

Cartwright (1951, p. 63) third principle also confirm that in attempts to change attitudes, values, or behavior, the more relevant they are to the basis of attraction to the group, the greater will be the influence that the group can exert on them.

Role of vendors

eService system development is often outsourced to third parties, who have the requisite skills and resources to develop these systems (Heeks, 2006). City Councils depend on the external software suppliers, called vendors. This section addresses the vendor's role in adopting eServices. Of respondents 40 per cent consider that a creative and innovative vendor often supports clients with more sophisticated technology and therefore, accelerates the council's technological development like eServices implementation. Moreover, the capacity of the vendor is a key determinant of the level of sophistication and time of adoption of eServices in a City Council. As Respondent15 acknowledges, We need to depend on our software vendors and we had to wait until they grew and developed that software for us. It was not like there were many options and we could pick one.

As Respondent1 notes the amount of customisation of any software is limited to the vendor's capacity and the terms of negotiation. Respondent8 represents a similar view, stating that vendors often supply pre-configuration software, with a small amount of customisation being undertaken by the council. Respondent17 highlights that the vendor often underestimates the complexity involved in the project and fails to meet expectations. Respondent18 agrees, stating that the vendor often fails to provide the full list of services that they had promised to provide. The vendor also fails to provide or maintain proper documentation for systems (Respondent18). Respondent2 notes a vendor often collaborates with other vendors to develop complex projects. Respondent15 comments, There are only two to three vendors in the market for local government. So if they don't move with the technology, local councils couldn't move as well.

Cartwright's (1951, p. 64) also mentioned that changes in one part of a group produce strain in other related parts which can be reduced only by eliminating the

change or by bringing about readjustments in the related parts. However, the vendor can also play a positive role in advancing eServices. For example, Respondent16 explains that their vendor wanted to have a web interface for the Enterprise Resources Planning System, as a part of a product development. This led to the development of many web based applications within the council.

Impact of unsupported relationship among business units

A City Council divides its operations among departments called business units. Generally, a City Council has around 15-20 business units. Though the business units run their operations quite independently, there are often services requiring cross business units' participation. This section addresses the business units' coordination related issues to implement eServices. Of respondents 43 per cent consider that there is a high impact on eServices development if relevant business units chose not to participate or actively support eService initiatives.

A lack of communication and insufficient coordination among business units are often attributed to the slow growth of eServices. For example, Respondent10 comments that, "There is no good internal communications between the major business units at this moment." This respondent added that they do not have any effective working group for eServices. Recently, the council experienced SAP implementation (an enterprise-wide software program). Respondent10 said, "Each of the business units operate on their own directions. So there is no coordination". Respondent12 notes further that each business unit has its own web pages, and develop and manage these sites in isolation. Respondent19 provides an example by comparing implementation of two recent projects in the City Council. One project was involving two business units. An efficient coordination had meant the project was completed before the schedule. However, the other project involving multiple business units was quite slow to implement.

Many respondents complain that the relevant business units are often unwilling to participate in cross business unit services. For example, Respondent1 explains, "I personally found the business units that will be affected by the project (a specific project) were quite reluctant to adopt the technology".

Respondent23 perceives that some business units, such as finance, are involved in many of the transactions. The challenge here would be to convince that particular unit to become involved in implementing new eServices. For some projects, a dedicated budget for eServices is made available by a council. For others, each participating business unit contributes and shares the expenses for eServices development. Respondent10 said that individual business units are often unwilling to pick up the cost of components. Ownership of the project should be made clear and it needs a home to be supported on a continuous basis (Respondent19):

Because it was never owned by any one and it was additional work, once you delivered the project, people seem to go away.

This respondent demonstrates some cases where the role of the related business unit was not clear to them and resulted in an unwillingness to support the eServices implementation. The final issue is to identify project initiators. Many respondents agree that such an initiative should come from the related business units for any particular eServices. Respondent17 notes, "We didn't have any managers from

business units who were asking for eServices. It was always the other way round. We centrally identified the process for eServices.

Respondent18 describes the situation as:

Rather than coming up with ideas, they [business units] try to establish their traditional way of doing jobs. They prefer paper processing and they don't want to change to the electronic process because they are not used to it.

Respondent19 notes that a lot of people in the City Council think the IT unit is responsible for eServices. While IT can help to implement eServices, it would not be implemented unless the related business unit are involved actively. Moreover, there is insufficient authority for IT units to influence people to adopt eService in other business units. To overcome un-supported behaviour within the groups, Cartwright's (1951, p. 63) advises that strong pressure for changes in the group can be established by creating a shared perception by members of the need for change, thus making the source of pressure for change lie within the group.

Concluding remarks

The present study finds that participating Australian City Councils are experiencing some degree of change in their structures and processes to support the implementation of eServices. This study finds that participating City Councils have been integrating some degree of eServices into their offerings on an incremental basis for more than a decade, but the pace of implementation is relatively slow compared with the speed of national adoption of eServices. Schein (1996a, b) argues that group behaviour stabilises at a new quasi-stationary equilibrium in this step, with a confirmation that performance is effective. This confirmation can come from task measurements, from responses of others that verify a new level of effectiveness, from social comparison with other units, or may be from one's own perceptions and interpretations (Schein, 1996a, b).

The present study finds that participating Australian City Councils are experiencing some degree of disconfirmation functions, while some participating Australian City Councils still maintain quasi-stationary equilibrium state. Although eServices require a major business process change (Burn and Robins, 2003), none of the participating City Councils in the current study report any organisation-wide planned change management processes to support the adoption of eServices. Employees of City Councils report that there has been very few process restructuring initiatives to support the implementation of eServices in the last decade. The successful implementation of eService requires a revision and restructuring of the organisation (Andreescu, 2008). Previous studies also argue that government needs radical change and re-invention to support the implementation of online services (Sprecher, 2000). Moreover, this study finds that, at present, there are some challenges with regard to inter-department integration and business units demonstrating ownership of eServices adoption. Clark (2003) also finds that an "integrated" environment is an essential requirement for effective eService implementation, which necessitates the elimination of any traditional departmental applications. That is, effective eService implementation requires replacing isolated, department-wide application systems with integrated organisation-wide application systems. The lack of technical and process integration of eServices is a noted challenge in other local eService studies

(Walsh, 2007). Each City Council needs an internal champion – that is, a person or a group of people who promote and leads the eService development within the council (Joseph and Kitlan, 2008). The structure of City Councils generally consists of several business departments. Unless each business unit is actively participating and demonstrates a sense of ownership for the change process, any effort to develop eServices will be limited (Andreescu, 2008). The challenges in inter-departmental integration and business unit's ownership of eServices adoption should be addressed. This may require councils to consider organisation-wide restructuring. Councils are also dependent on external software vendors for the provision of eServices. In the case of vendor selection, councils do not have a variety of choices, due to a limited number of vendors competing in this market. There is a need for more attention to build vendor's capacity or to perhaps engage vendors outside Australia.

While this paper agrees that organisations must commit resources for individuals who are involved in the implementation of new technology (Becker, 2010), findings reemphasise the importance of the group in shaping the behaviour of its members in a changing situation. Empirical evidences presented in this study support Lewin (1947) that the main focus of change should be on group behaviour rather than individuals. This paper concludes that local government in Australia needs to focus more on intra group or business unit relationship to have better adoption of eServices. There is a need for more interaction among business units and an improved process of integration for successful adoption of eServices in City Councils. Formation of a formal committee consisting of members from different business units would be a useful tool for technology related change management. There exists a confusion of roles and unclear role responsibilities between information technology and other business units. Also limited availability of vendors is a barrier for eService implementation in City Councils in Australia. Finally, a lack of communication and coordination among business units may attribute to the slow growth of eService. The theory of Group Dynamics suggests that we need to focus on the individual's relationship with the group (Cartwright, 1951). Individual's put all the effort to change to meet the expectation of the group. In the case of City Council, each business unit (Group in this case) needs to understand and set a high standard for eServices in order to secure their employees full professional potential. City Councils in Victoria are devoting their efforts to train individuals to adopt eServices. However, Group Dynamic theory has proved that efforts to select the right man in the right job; simplify the job for him/ her; train him/ her in the skills required; motivate him/her with economic incentives; keep the line of authority and responsibility simple and straight and is necessary to increase productivity of individuals in the work setting (Cartwright, 1951). So therefore, this research suggests that City Councils need to pay attention to the analysis and understanding each business unit's behaviour in order to implement eServices to gain its full potential.

In order for city councils to be better prepared for the changes in technology and working practices associated with eService a greater focus needs to be given to the unfreezing phase of the change model. Effective eService transition requires managing the issue of learning anxiety (Schein, 1996a, b) and creating a positive and safe psychological climate. Using a range of tactics associated with managing change the successful implementation of eService will require a level of motivation sufficient to overcome any prevailing threat and uncertainty.

Successful implementation of change requires Chief Executives and Directors to act as both champions and agents of change (Joseph and Kitlan, 2008). With such direction and some significant pre-requisites for change such as the need for departmental integration and business unit ownership of eService, together with a vendor capacity assessment, the eService change process may be easier to achieve.

This study is limited by the sole metropolitan area and the small number of councils represented. Also a significant difference exists in eService development in urban and rural councils in Australia (Teicher and Dow, 2002). To be able to more fully generalise findings the sample size needs increasing with a more representative mix of councils over a wider geographical area.

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