**A Cultural Theory Analysis of E-Government: Insights from a Local Government Council in Malaysia**

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**Abstract**

*In this paper, we use the ways of life proposed by cultural theory*—*hierarchism, fatalism, individualism, and egalitarianism*—*to explain the social relations and dynamics over time, which affected the ability to implement and manage a major ICT-enabled government change initiative (e-services). This is illustrated using an in-depth case study of one local government council in Malaysia. Our analysis found culture to be evident across multiple levels, including organizational (local council), subgroup (project team, operators, user group) and individual (IT consultants) in the context of the e-services project. More specifically, various characteristics of the ways of life were salient in the e-services project, particularly during the early years*—*mostly*, *hierarchism and fatalism at the organizational and subgroup levels, and individualism at the individual level. Furthermore, the study found changes, for instance, the emergence of egalitarianism at the subgroup level over time. The paper acknowledges that in order for researchers to understand how culture influences e-government, the focus of attention needs to shift from solely concentrating on the organizational level to also understanding the dynamic and fragmented nature of culture at the group and individual levels.*

**Keywords** ICT implementation, E-services, Cultural theory, Organizational culture, ICT and government.

**1. Introduction**

Governments worldwide are increasingly harnessing the potential of electronic government (e-government)—use of information and communication technology (ICT), such as the Internet, wide area networks, and mobile technologies in the public sector—to control costs and improve service efficiency (Barbosa et al*.* 2013; Bellamy 2001; Carter and Weerakkody 2008; Foley and Alfonso 2009; Weerakkody et al. 2015). While ICT has the potential to enhance how governments deliver services to citizens (G2C), other governments (G2G), employees (G2E), and businesses (G2B) (Jeong 2007), its deployment is supported by a wide number of stakeholders, which can influence the success or failure of e-government. These stakeholders can be broadly classified into demand side (those who use e-government systems, such as citizens) or supply-side (those who design, implement, maintain, and manage e-government, for example, government councils) (Reddick 2005).

From a demand-side, put broadly, often the focus is to understand the factors (such as gender, education level, age, income, and digital divide) that influence how citizens interact with and use e-government services (Gauld et al. 2010; Mirchandaniet al. 2008; Rana et al. 2015a, 2015b; Rufin et al. 2012; Shareef et al. 2014). This line of research acknowledges that an understanding of e-government from the citizens’ perspective is useful for aiding the government in better planning for services. From a supply-side, research has focused on the provider of e-government services, particularly the technological (Al-Sebie 2015; Ramaraj and Bhasker 2011), political/legal (Ahn and Bretschneider 2011; Bertot et al. 2012; Vedder et al. 2014), and organizational factors (Jain and Kesar 2011; Klopp et al. 2013; Meijer et al. 2012; Weerakkody et al. 2012) that can influence e-government. One important organizational factor that can act as an enabler or a barrier (more often the latter) to e-government deployment is organizational culture. Research (Choudrie et al. 2012; Gasco 2007; Wong et al. 2009) has suggested that organizational culture can be a powerful constraint on ICT, especially e-government, and a lack of effort in understanding and addressing organizational culture is a key reason why many government ICT projects encounter problems.

 Notwithstanding the importance of organizational culture, this paper recognizes that the concept, to date, in e-government research, has been used rather narrowly. Firstly, culture is often treated as collectively shared at the organizational level, downplaying an understanding of its effects at the subgroup and individual levels. Secondly, problems arise with how frameworks for analyzing culture have been used by e-government researchers. For instance, the typical level of granularity is to use the framework as a static tool to compare and contrast cultural types found in e-government, obscuring the dynamism that lies between dimensions. Thirdly, concerns can be raised in relation to how cultural change takes place. All too often, a technological deterministic approach (assuming that ICT is the key driver of organizational culture) or managerial logic (organizational culture can be radically fashioned by managers in the short-term) is followed. One line of enquiry (Jackson 2011; Jackson and Philip 2010; Wong et al. 2009) has called for an increased awareness of how cultural change takes place through a process of social construction, whereby different constructions of culture emerge. However, our understanding of how culture is socially constructed by groups and individuals and how culture changes over time, in the context of e-government research, still remains a prominent, yet under-researched issue.

In this paper, we acknowledge that important insights can be gained by using grid and group cultural theory as a rich explanatory lens to explore these challenges. The usefulness of the framework is illustrated using an in-depth case study of one local government council in Malaysia, namely from 2003-2013, and its adoption of e-services. By e-services, we refer to the use of ICT to facilitate the delivery of services, such as licensing renewal, planning approval, payment of land tax, and summons payment.

This paper is organized as follows. The context and background to the study have already been highlighted. Next, literature relating to organizational culture in e-government research is briefly reviewed. The theoretical framework (cultural theory), including its justification for this study, is then introduced. This is followed by a discussion of the research method. Research findings are then provided, and the implications, limitations, and future research of the study are outlined.

**2. E-government and culture: A literature review**

Over the last few decades, interest in understanding and exploring cultural issues among e-government researchers and practitioners has been on the increase. Organizational culture is a key factor in e-government change programs, often acting as a powerful restraint on e-government, and overlooking it is a chief reason why e-government ventures fail (Choudrie et al. 2012). Despite the importance of culture, the concept has been defined in various ways (Leidner and Kayworth 2006). Even as far back as the early 1950s, Alfred Kroeber and Clyde Kluckhohn (1952) in reviewing conceptualizations of culture found 164 definitions at that time. Given the multitude of characterizations of culture, this makes the term extremely challenging to conceptualize, and its scope and boundaries unclear. As word limit does not permit us to provide all definitions of organizational culture in e-government research, one common depiction, comparable to Schein (1985), is to view it as consisting of artefacts, values (beliefs), and/or assumptions (Burn and Robins 2003; Kanungo and Jain 2011; Nograsek 2011; Svard 2014; Wright 2013). According to Schein (1985), artefacts are the most visible and tangible elements of organizational culture. Espoused values are concerned with an organization’s stated beliefs and rules through its strategies, philosophy, and goals. Lastly, basic underlying assumptions include the deeply held conventions, thoughts, and feelings.

Notwithstanding the importance of culture, this paper acknowledges a number of challenges in e-government culture research. One challenge is the assumption that culture is treated solely as something that is collectively shared at the organizational level. Wong et al. (2009) note that a major concern in e-government culture research is that the approach taken is usually to equate culture with an organization. The potential problem with this view is that it ignores the fact that organizations can consist of subcultures, which can impact the use, implementation, and management of e-government projects. Moving away from an organizational perspective, others (e.g., Gasco 2007; Helbig et al*.* 2009; Jackson et al. 2007), although less prevalent in e-government research, have acknowledged that subgroup differences are very much part of e-government projects and should be considered when analyzing culture. Organizational groups will more likely have dissimilar ways of looking at and perceiving the world, and it is therefore important that researchers take into account that the same ICT, including attitudes towards its implementation and management, can be interpreted differently. Gasco (2007), for instance, in examining resistance towards e-government development in the civil service, found that the existence of subgroups (scientists, politicians, and bureaucrats) led to groups acting as “Taifas Kingdoms,” where each group perceived itself as distinct, leading to coordination and information-sharing challenges. Despite the acknowledgement that subgroups may be implicated in government initiatives, analyzing culture across multiple levels (e.g., organizational, group, or individual) concurrently still remains an area to be explored in more detail (Jackson 2011; Wong et al. 2009). Adopting a multi-level approach might provide greater insight for predicting and understanding how different factions respond to government ICT change initiatives and the likely impact this would have on its uptake and adoption.

Another challenge is with how frameworks for analyzing organizational culture have been applied. Some examples of frameworks to investigate e-government culture include Wallace’s (1983) three dimensions (bureaucratic, innovative, and supportive) of culture (Kanungo and Jain 2011; Nurdin et al. 2011); Denison and Mishra’s (1989) four cultural dimensions of adaptability, involvement, mission, and consistency (Nurdin et al. 2011); and Quinn and McGrath’s (1985) competing values framework, which analyzes organizational culture through four cultural types—group, development, rationale, and hierarchical (Kim and Kim 2003; Twati and Gammack 2006; Yang and Melitski 2007). Kanungo and Jain, (2011) in their study of the effects of organizational culture on the success of e-government initiatives in 13 government organizations in India, found the supportive and innovative dimensions to be positively related to e-government performance (work process improvement and job satisfaction), while the bureaucratic dimension (the dominant cultural type) related both positively and negatively to e-government performance. Nurdin et al. (2011) used three of the cultural dimensions proposed by Denison and Mishra (1989) (adaptability, involvement, and mission) and Wallace’s (1983) bureaucratic dimension to shed light on the adoption of e-government in local government councils. Relating the dimensions to barriers in e-government, they revealed how lack of involvement (participation, commitment, partnership, and responsibility); poor adaptability (change management, transparency, trust, and learning); unclear or ambiguous mission (vision, goal, and strategy); and stifling bureaucracy (regulations, organizational hierarchy, and coordination) can have a negative impact on e-government adoption.

While existing approaches provide useful insights into how culture influences e-government, problems often arise with how the framework has been used by the researcher. A common approach followed is to use the framework as a static device to simply compare and contrast cultural dimensions found in e-government, whereby an organization exhibits certain observed cultural differences compared to others (e.g., a high degree of the bureaucratic dimension in contrast to innovation) or uses the framework to identify which cultural type (or combination of cultural types) best facilitates or constrains e-government practices. Relatively few e-government studies have utilized frameworks from a dynamic approach—examining the active tensions, actions, and power relations that exist between cultural types.

Added to these problems are issues concerning how cultural change takes place in organizations. Some (Bertot et al. 2010; Kumar et al. 2013; Noveck 2009; Vijaykumar 2011) have adopted a technological deterministic stance, assuming that ICT wields some sort of specific (often positive) influence on government organizations, thus causing predictable, autonomous changes to organizational culture, as well as to business processes, structure, and performance. Another set of beliefs about e-government culture is that managers, by imposing certain strategies or through deliberate choice-making exercises, can manipulate the direction a culture takes in order to make it more receptive to ICT, often prior to its adoption (Allen et al. 2001; Barbosa 2013; Burn and Robins 2003; Nograsek 2011). This approach bears a resemblance to the view that was popularized in management discourse in the early 1980s (Ouchi 1981; Peters and Waterman 1982) that managers can apply prescriptive, practitioner-oriented principles to deliberately manipulate culture as they please. However, the idea that ICT is the key determinant driver of cultural change, or that culture can be radically refashioned by managers has been questioned by ICT academics (Doherty and Doig 2003; Gallivan and Srite 2005; Robey and Azevedo, 1994).

Moving away from planned technocratic and managerial explanations, researchers have called for, or adopted, social constructionist accounts (Heeks and Bailur 2007; Jackson et al. 2007; Wong et al. 2009) to understand e-government cultural change, acknowledging that culture is subjective, formed through social interaction, and different constructions of culture can emerge as groups and individuals respond to changing ICT events around them. Two useful classifications for analyzing social constructivism include strong social constructivism and weak social constructivism (Schwandt 2000). In contrast to strong social constructivism where “individuals and societies have such enormous flexibility that anything goes” (Gottschall and Wilson 2005, p. 22), weak constructivism, while embracing the notion of flexibility, also accepts a position of objective reality (Martin and Peterson 2009). In analyzing social constructionist accounts in e-government culture research, the approach often followed is a weak form of social constructionism (e.g., Jackson et al. 2007; Wong et al. 2009). In other words, rather than attempting to account for the totality of the cultural situation, the researcher assumes some form of selectivity (e.g., guided by a particular theory, framework or historical disposition), drawing attention to specific characteristics of the phenomenon under investigation. Nevertheless, much research still remains in e-government to understand how different individuals and groups socially construct meaning over time and what effect these different meanings have for the implementation and management of e-government initiatives.

**3. Theoretical framework**

**3.1 Cultural theory**

Cultural theory is an anthropological approach developed by world-renowned British anthropologist Mary Douglas (1970). In Douglas’s early research and fieldwork, her main focus was on devising a typology to classify how different social relations form cultural values and beliefs in society. Over the years, the theory has been applied to many areas of social science. Some areas in which the theory has been applied include public policy, religion, political theory, policy sciences, corporate governance, disaster preventative management, family structures, and management. The theory has been applied less to the IS field (with some notable exceptions, such as Jackson 2011; Philip and McKeown 2004; Tsohou et al. 2006; Wong et al. 2009).

Cultural theory distinguishes three important interrelated concepts with regards to understanding culture: social relations, cultural bias, and ways of life.Social relations refer to an association between one or more individuals. Cultural bias refers to values and beliefs constructed by social relations. Finally, a viable combination of social relations and cultural bias refers to a way of life. Social relations and corresponding cultural bias do not form an association in a random fashion; instead, they are closely tied to a particular way of life (Thompson et al. 1990). The theory argues that social relations can be identified using two basic dimensions: grid and group.

Grid refers to the extent to which a member’s existence is bounded by externally forced rules and regulations or, as Thompson et al. (1990, p. 5) put it, by “externally imposed prescriptions.” The more obligatory and sweeping these externally imposed prescriptions placed on individuals (such as forced rules and regulations), the higher the grid element. In low-grid environments, imposed restrictions are given relatively less importance.

Grouprefers to the extent to which members are absorbed in and sustained by the actions of the group (Douglas and Wildavsky 1982). In a high group setting, members will be compelled to act in accordance with the collective interests of the group. In low group environments, individuals will be less obligated to act in the interests of the group.

Applying the two dimensions, grid and group, leads to four ways of life: fatalism, hierarchism, individualism, and egalitarianism (figure 1).

*INSERT FIGURE 1 HERE*

*Hierarchism* is characterized by strong grid and strong group. In this orientation, there will be a strong preference for rules, power, and bureaucratic customs. Externally imposed prescriptions (e.g., age, seniority, gender, and education) will be important for positioning one’s role (strong grid). Emphasis will also be given to group concerns (strong group).

*Fatalism* is characterized by strong grid and weak group. Members feel that their actions are largely controlled by others (strong grid) and view themselves as peripheral members of society with limited voice (weak group).

*Individualism is* characterized by weak grid and weak group. Members will have a distinct disposition to act on their own terms and will not feel obliged to conform to the expectations of the group as a whole (weak group). Externally imposed factors play a less important role in this orientation, and strong emphasis will be placed on individual autonomy (weak grid).

 *Egalitarianism* is characterized by weak grid and strong group. In this way of life, members place a strong emphasis on the importance of equality and fairness. Inequality through rank, gender, age, and autocratic leadership is shunted and eradicated (low grid). Group concerns take priority over individualist interests (strong group).

**3.2 Application of cultural theory**

As it would be unworkable to identify all aspects of cultural theory, in this section, we outline three applications of the theory, which, at first sight, might address some of the gaps identified in section 2. Firstly, since the theory has been applied across multiple levels (e.g., organizational, subgroup, and individual) (Jackson 2011), it should have no problem in dealing with the multilayered nature of organizational culture. Secondly, we adopt a dynamic view—ways of life are in a state of flux with each other, and there may be movement between them (Douglas 1999; Jackson 2011; Schwarz and Thompson 1990; Thompson et al. 1990). Thirdly, similar to other cultural theory approaches (Jackson 2011; Mars 1982; Wong et al. 2009), we utilize the theory as a social constructionist lens in an attempt to capture deep insights into the different constructions that individuals/groups attach to e-government. Although it is acknowledged in cultural theory that each way of life can assert either a “positive” or “negative” grip (Thompson et al. 1990 p. 17), in this paper, due to word restrictions, we concentrate mostly on the negative forces, which represent the dominant strengths at play, particularly in the e-government project. Table 1 below provides a summary of the link between research challenges and cultural theory.

*INSERT TABLE 1 HERE*

**3.3 Research question**

In summary, this study attempts to address the following research question:

How do the ways of life explain the social relations and dynamics over time within a local council, which affect the ability toimplement and manage the e-services project?

**4. Background to the case**

For this study, we decided to focus on Malaysia. Malaysia is selected because it is an interesting case as the country has introduced a major program of e-government transformation. This reform has largely been shaped by *Wawasan 2020* (Vision 2020), a project unveiled by the then prime minister Mahathir Mohamad in 1990 to leapfrog Malaysia into the information era and achieve fully developed status by 2020. To meet the challenges and goals of Vision 2020, the Multimedia Super Corridor (MSC) was launched in 1996, and e-government, along with six other flagship applications—national multi-purpose card, smart schools, telehealth, research and development clusters, electronic business, and technopreneur development—were created. More specifically, seven projects were identified as central to achieving the e-government application, including electronic labor exchange (ELX); electronic procurement (EP); electronic services (e-services); electronic syariah (e-syariah, to enhance service quality in courts); generic office environment (GOE); human resource management information system (HRMIS); and project monitoring system (SPP II).

In this paper, we focus particularly on e-services, since this is one of the most significant e-government projects introduced at the local council level. Local councils (pihak berkuasa tempatan or kerajaan tempatan in Malay) are the lowest level of government in Malaysia, after federal and state levels. The role of councils is to collect property taxes, as well as to provide other services, such as granting trade permits, city and urban planning, building control, and managing waste and rubbish. As of 2014, the total number of local councils in Malaysia stands at 149 (Ministry of Housing and Local Government 2014). E-services involve the use of ICT to facilitate the delivery of services, such as licensing renewal, planning approval, payment of land tax, and summons payment. Since the launch of the e-government flagship in 1996, the overall pace of e-service deployment among local councils has been relatively slow. By August 2003, only 41 local councils in Malaysia either did not have a website in place or had an incomplete website. Only 11 of these councils, most of whom are larger and more profitable [gross income of RM100 million a year ($23,691,000) compared to RM2 million ($473,820) by others], had more than 5 e-services, with 92 councils having less than 5 e-services in place (Ghani and Said 2010; Khadaroo et al. 2013).

**4.1 The research site**

As the study was primarily interested in examining “depth” over “breadth,” one local government council was selected for this investigation. The local government was chosen because full access was granted by managers of the organization. The council studied was established around 1960 as a rural district council. As of August 2006, the council employed about 180 staff, and this number had grown to approximately 210 in December 2013. A simplified version of the structure of the council is shown in figure 2.

INSERT FIGURE 2 HERE

**4.2** **Method**

A qualitative explanatory case study was used for this investigation (Stake 2005; Yin 2003). This involved using cultural theory to explain social relations and change dynamics in the context of the e-services project. An embedded unit analysis (more than one subunit of analysis) was adopted, and involved identifying culture at three distinct, yet embedded levels, namely the organizational, subgroup, and individual level (Yin 2003). Multiple methods, consisting of interviews, documentary analysis, and observations, were used. Prior to the investigation, the IT manager was initially contacted by telephone and expressed an interest in the study. The study also had the support of the senior management team. Interviews were semi-structured to allow for openness to explore emerging themes and typically lasted 1.5 to 3 hours. With the permission of each interviewee, a dictaphone was used to make an accurate recording. Most interviews were conducted in Malay and were later transcribed to English. Interview consistency was maintained by using standard research questions. A total of 21 interviews were conducted (11 interviews from June-August 2006 and 10 interviews from September-December 2013). The number of interviews was deemed adequate as saturation was reached in relation to the identification of new themes and insights being gathered. Interviews consisted of 18 formal interviews (transcribed and recorded) and 3 informal interviews (unrecorded chats with staff or by telephone where notes were taken). Table 2 provides an overview of interviewees. A sequential design approach was followed, where two instances of the same phenomenon (e-services) were compared at two distinct points in time. These two distinct points represented different phases in the e-services project, where the first study examined the initial stage, and the latter the final stage. This approach allowed for a longitudinal element,[[1]](#footnote-1) as well as an in-depth examination of cultural similarities and/or differences of a single case, involving mostly the same participants over time.

*INSERT TABLE 2 HERE*

Interviewees were selected by purposefully choosing respondents involved in e-services from across levels and departments at different points in time. During the interviews, participants were asked a number of generic questions, including background information about the e-services project; organizational culture; the roles, functions, and relationships of different stakeholders involved in e-services; common value statements held by each stakeholder; and project outcomes. Further probing questions were asked to clarify and discuss emergent themes of interest, as well as to go deeper and understand the dynamics and reasons for observed cultural differences. In order to describe culture, participants were presented with a summary of the four ways of life outlined in cultural theory.

Nevertheless, we were also aware of the need to account for the common perceptual errors that are part of any qualitative evaluation, including, for example, rich false memory, information anchoring, poor recall, confirmation bias, or optimistic focusing effects (Jackson and Fearon 2014). To minimize the risk of participants being unable to recall events, all interviewees were briefed on the subject area prior to their interview, providing ample time to recall important events.

A number of documents (mostly used to identify key dates) were also collected, including minutes of project meetings, internal documents, and government reports. Observations were also conducted to understand the organizational culture. For this study, a non-participant observation role was adopted, whereby there was limited interaction with the subjects observed. Observations consisted of the work arrangement, technology used, and organizational practices, and were conducted mostly before and after interviews over a three-month period. During observations, brief notes were taken relating to what was observed, and observations also became an important part of interview discussion. Informal techniques were also used, for instance, chatting to staff in corridors.

**4.3 Data analysis**

Cultural theory was used as the theoretical lens for interpreting and coding data. Data analysis consisted of a number of steps. Step 1 consisted of bringing all the sources of evidence together. Step 2 involved mapping the different types of social relations involved in the implementation and management of the e-services project. This consisted of linking the types of social relations outlined by participants to the ways of life proposed by cultural theory using tables and rich diagrams—a common anthropological technique for analyzing culture (Alasuutari 1995). Step 3 involved identifying corresponding value statements (themes) typically associated with social relations. These themes were largely derived from previous works that used similar coding in the theory’s literature (Jackson 2011; Jackson and Philip 2010). The aim was not to count the frequency of themes through statistical analysis; rather, these themes acted as a broad guide to frame the analysis and became more meticulous as the analysis was extended. Examples of shortened coding for fatalism included powerlessness [F1], passivity/apathy [F2], and isolation [F3]. For hierarchism, examples included rule-bound [H1], power/control [H2], and bureaucracy [H3]. Examples for individualism included independence [I1], enterprising [I2], and self-interest [I3]. For egalitarianism, examples included equality [E1], empowerment [E2], and informality [E3].

**5. Findings**

**5.1 Initiation**

There was growing concern that existing manual service functions, due to growing citizen demand, were not sufficient in supporting the long-term needs of the council. Many citizens were of the view that the council needed to do more to keep pace with the Internet revolution. Despite this increased pressure, the council did not have the appropriate ICT infrastructure in place to support the provision of e-services. One interviewee shared: [Referring to the past] “Departments did not communicate effectively together, systems were outdated and the council was not set up to deal with electronic services” (Interviewee 8, Study 1).

To overcome these challenges, in 2003, a decision was made collectively by senior managers to implement e-services, both in the immediate future and for the long term. These services would include the following: e-assessment (allows customers to pay land tax online); e-complaint (citizens can submit complaints and make suggestions about service improvement); e-compound (enables customers to check and pay levies for impounded vehicles and traffic fines); e-forum (acts as an electronic discussion medium, allowing members to discuss matters of interest in local government); e-licensing (enables citizens to register and renew their entertainment and advertisement licenses); e-submission (citizens can obtain town planning, building, and engineering approval from local authorities); and e-rental (allows community members to rent venues for sporting events and ceremonies). While the Internet is the main channel of e-service delivery, other channels include call centers, kiosk points, and telephone. A number of infrastructure, hardware, and software improvements would also be implemented in order to facilitate the delivery of these services.

**5.2 Stakeholders involved in the project**

In early 2004, a number of stakeholders were set up to coordinate the e-services project. These included a project team, third party vendors, and operators. External consultants would also be used to provide support for the project; however, they were not considered to be an organizational subgroup. Additionally, a user group was formed in 2006/2007. A summary of the key stakeholders involved in the project, including their composition and roles, is outlined in table 3.

*INSERT TABLE 3 HERE*

**5.3 Cultural theory analysis**

To reiterate, the main aim of this study is to examine, using a multi-level approach, how the ways of life explain the social relations and dynamics within the local council over time, which affect the ability toimplement and manage the e-services project.

**5.3.1 Hierarchism**

Hierarchy was a defining and prevalent feature of the council’s organizational culture and was most prevalent among senior managers (departmental managers and above, figure 2), who were referred to by others as the “controllers” (*pengawal* in Malay), “enforcers” (*penguatkuasa*), and “bureaucrats” (*birokrat*). The authority and expertise of senior managers were not to be questioned by subordinates (high grid). Direct involvement of subordinates was seen as a “sign of weakness” *(petanda kelemahan)* on the part of senior managers. The predominant fear among senior managers was perceived loss of power and control, and the latent strategy of those in higher positions was to protect their internal structure of authority. Audacious behavior was something not strongly encouraged within the council and was only tolerated up to certain limits. If anyone crossed the line, strong sanctions or penalties were imposed to prevent this from happening again. For instance, it was the cultural norm for those who stepped out of line to be pulled up by senior managers and given an *amaran rasmi* (official recorded warning). While managers occupied positions of power, they also carried a moral obligation to sustain order and solidarity through the adherence to explicit and implicit organizational rules and regulations (high group).

During the initial stages of the e-services project in 2004, the council’s culture of hierarchy reemerged within the confines of the project team subgroup. Decision-making regarding the design and development of e-services relied heavily on project team members. Communication about the progress of the project was essentially top-downand formal in nature. One interviewee commented: “Decision making about what we are going to do is done in the project team and it is just permeated down to the rest of us” [H2](Interviewee 12, Study 1). An analysis of internal project reports revealed that communication took place predominantly via formal means: through official meetings and memoranda. Observations at meetings in 2006 similarly found the formal nature of communication. For example, it was custom for subordinates to speak to senior managers using a system of formal titles, rather than on a first-name basis. Higher-ranked levels rarely sat beside lower-ranked levels, and the outcomes of meetings were often for lower-ranked staff to simply comply and rubber-stamp decisions already made by senior managers.

When broadband, hardware, and software applications (accounting and finance, office suite, email, and content management) were implemented to support e-service delivery, over a number of phases in 2004/2005, not all resources were evenly distributed across individuals and groups. Operators had restricted access to the Internet and had to justify to departmental managers why access was needed before it was granted. Only senior management and heads of departments had privileged access to the Internet. One respondent commented: “Here, we are not allowed to surf the Internet during working hours. The only time that we are allowed to surf the Internet is during lunchtime, and also in the evening when we have finished our work. The Internet will be blocked after 2pm” [H1/H3] (Interviewee 4, Study 1). This was not surprising since lower-ranked staff were perceived as not being equal in social status and did not enjoy the same workplace benefits or lavished resources as higher-ranking staff.

As a result of the hierarchical and clearly authoritarian approach of the project team, gaps occurred in communication. Operators were not sure of what was expected of them or the benefits of using ICT to support e-services. One respondent commented: [Referring to e-services] “We have not seen the benefit of this… what we have seen is increased bureaucracy” [H3] (Interviewee 3, Study 1). During the initial study in 2006, there was little evidence of trust and support to allow operators to adapt to the proposed systems. The actions, or rather inactions, of the project team subgroup did the reverse: They made it difficult for operators to adapt to change and acted as a strong deterrent to assurance and commitment.

The follow-up study revealed that hierarchy was still very much prevalent at the organizational level, whereby senior managers continued to act in ways that lead to the preservation and attainment of power and control: “The council is still controlled by the officials, pure bureaucracy at times” [H2/H3] (Interviewee 2, Study 2); [Referring to the top level management] “power continues to exist”[H2](Interviewee 9, Study 2). However, some changes did take place at the subgroup (project team) level, including redefining the roles and responsibilities of project team members.

**5.3.2 Fatalism**

The study also found strong evidence of fatalism at the organizational level, particularly among subordinates. Many saw their independence as being largely constrained by the top and felt excluded from group decision-making and rule-setting. Lower-ranked staff typically perceived themselves as *yang tidak sama rata* (unequals) and *penjawat awam* (public servants) and worked to merely meet the demands of seniors, with which they had limited voice (high grid). Common statements to support this included: “I do what I am told to do” [F1] (Interviewee 4, Study 1) and “I am a junior in this council…I have no authority” [F1] (Interviewee 3, Study 1). Subordinates also experienced a high degree of isolation (low group)—fragmented and not part of a wider entity or group: *“*We are alone rather than together in these processes” [F3] (Interviewee 12, Study 1), and “there is the feeling of isolation” [F3] (Interviewee 4, Study 1). In many ways, subordinates feel like isolates (Douglas 1999)—cut off from the top, with little voice and limited scope for self-sufficiency.

The initial study in 2006 found the fatalistic outlook resurfacing at the operator group level. This group perceived the project as something ultimately pre-determined by the project team, over which they had limited say and involvement. One operator commented: “They [the project team] went ahead and made changes without consulting with us” [F1] (Interviewee 4, Study 1). Another participant acknowledged how “it’s down to the whole area of feeling involved in it [e-government]” [F3] (Interviewee 12, Study 1).

Research (Bista 1991; Southern and Hilton 2015; Stoker et al. 2011) has shown that fatalism can bring about withdrawal, resignation, and demotivation from activities. A common sentiment arising from respondents was that fatalism fostered an environment where many did not commit themselves to e-service-related events. When in-house training programs were introduced (particularly around 2004), the response mechanism for many was to remain inwardly uncommitted and to just try and cope the best one could. Attendance at training and meetings was perceived as an additional work burden, and there were no incentives or rewards for attending.

 Many operators depicted an outlook that was both cynical and apathetic. An ambiance of negativity and gloominess occurred at sessions and meetings. One respondent who was involved in training sessions commented: “We organized the IT training in-house…users [operators] were not interested and they aren’t using what they have learnt at sessions [F2] (Interviewee 1, Study 1).

Operators became quickly demotivated after ICT applications were introduced into the council. Many felt that their work was repetitive, with no signs of immediate improvements in the near future. One participant commented: “When new technology comes in, very quickly you fall into not being motivated yourself…everyone else around you is unmotivated” [F2] (Interviewee 12, Study 1). Such lethargic behavior led to a situation where many operators made little effort to change their ways, and reliance on existing processes continued to be the norm. Many were not prepared to put the effort in and instead remained aloof and uncommitted. For instance, one respondent shared: “Many users [operators] are still not using the systems” [F2] (Interviewee 2, Study 1).

The follow-up study revealed that fatalism was still marked at the organizational level. Subordinates typically felt fragmented and the organizational milieu was one of apathy. Consequently, lack of intrinsic motivation and job involvement was still part of the council’s culture: [Referring to taking on something new] “A lot of staff wouldn’t be bothered. What’s the point?” [F2] (Interviewee 3, Study 2); “most of us are cynical about new regimes in here” [F2] (Interviewee 4, Study 2).

In the context of e-services, however, some change was noted at the group (operator) level, including a stronger sense of commitment to e-services. An underlying reason for this improved commitment was the increased awareness among operators of the potential value of ICT. Often those who were competent in using e-government systems were seen as *lebih menarik* (more attractive) within the council.

**5.3.3 Individualism**

The initial study in 2006 revealed a social context dominated by individualism (self-interest rather than enterprising individualism), particularly among external IT consultants at the individual level. Consultants enjoyed a free-reign status and were not perceived as being fully part of the council (low group). Consequently, consultants were less bound by the system of rules and regulations as imposed by other organizational factions (low grid). They were referred to informally as “tending to follow their own rules,” “alone,” and “individualistic.”Although they were praised for knowing their job, they were also renowned for their individuality—being connected loosely to the council, which they were only temporarily part of (low group). As one interviewee commented: “Consultants are alone from the rest. They are more separate than attached” [I1] (Interviewee 9, Study 1).

An underlying reason for this relatively free-reign status was not only because they were a transitory part of the council but also due to many senior managers and IT staff lacking sufficient technical expertise. For instance, the IT group within the council played more of a “maintenance” role than a “development” role, and even the head of the IT group was not involved in strategic decision-making, nor was he in charge of his own budget in 2006. One respondent commented: “I’m not sure if it’s the case in other councils, but in here a lot of IT guys [labelled as ‘guys’ due to the group’s male dominance] aren’t knowledgeable on how systems are developed. They are mostly involved in dealing with general [implying basic] IT problems. The group [referring to the IT department] take more of a back stage… consultants benefit from this” [I2] (Interviewee 1, Study 1).

Drawing on the back of this incompetency, as the project progressed, some consultants became more individualistic in their outlook, putting their individualistic interests over the collective interests of the council. One respondent shared how consultants typically “look out for themselves” [I3] (Interviewee 2, study 1). Tsohou et al. (2006), in their study of information systems risk management strategies, found that when individuals put their own interests above the interests of the collective whole, it can lead to members not performing their tasks and roles effectively. In the case of the council, it was common practice for consultants to look for ways to cut down software development times in order to keep within agreed targets and costs. Software applications, for instance, were sometimes developed without the appropriate documentation, or software testing was quickly glanced over, resulting in applications not always being used as intended. Furthermore, consultants often engaged in forms of rule-breaking behavior. Hours were billable, and the more allocated hours they had, the larger the financial rewards they received. It was often common practice for consultants to overbill for work completed, making it difficult to establish the true costs of their use. Additionally, many consultants had the propensity to exploit opportunities to their own advantage. Rather than sticking to standardized design protocols, they often relied on their own practices, making it difficult for in-house staff and other developers to analyze what software design was being used. An underlying motive for doing so was that this was seen as a mechanism to *melanjutkan kontrak mereka* (extend their contract) to a business-as-usual situation, as it would be costly for the council to take on new consultants.

In 2009, a new head of IT was headhunted by the new chairman to oversee e-services adoption and implementation. Despite efforts to reduce the individualistic tendencies of consultants by bringing the bulk of operations back in-house, thus reducing the reliance on consultants, there was still the recognition that individualism continued to be a feature of the council. Some of these statements included the following: “Consultants still follow bad practice” [I3] (Interviewee 1, Study 2) and “The working relationship [still] isn’t brilliant” [I1] (Interviewee 2, Study 2).

**5.3.4 Egalitarianism**

While the follow-up study reconfirmed a dominance of fatalism, hierarchism, and individualism, it also showed the appearance of egalitarianism or what Douglas (1996) referred to as “*enclavism*,” where there is a tendency for like-minded individuals to form a distinct group within a larger unit. A note of caution, however—we are not claiming that egalitarianism was part of the organizational culture; rather, it emerged at the subgroup level as a result of the formation of a user group in 2006/2007.

The key purpose of the group was to meet regularly, often on an ad-hoc basis, to share concerns, interests, and ideas surrounding the e-services project. Participation in the group was voluntary, and the actions of the group were, to a large extent, controlled by its group members, not by the project team. This gave rise to an orientation where members witnessed a low degree of regulation (low grid). Since this group was organized and defined by the individuals who joined it, members experienced a high degree of solidarity (high group). This was exemplified through distinctly egalitarian themes, such as “empowerment,” “self-management,” and “face-to-face accountability.”

While the project team typically aimed to maximize distance between higher and lower levels based on top-down constraint, in contrast, the user group sought to limit the difference between higher and lower ranks. Internal role differentiation was less, and formal classification, position, and status were not of prime moral concern within the group: “There is not a them and us [attitude] between [user group] members” [E1/E3] (Interviewee 1, Study 2); “group members address each other by their first name” [E3] (Interviewee 4, Study 2). Meetings were carried out in an open space to facilitate good communication and to maximize social interaction.

More emphasis was placed on the egalitarian spirit of equality: “People [members] aren’t that critical of one another. They don’t hold each other accountable to blame” [E1] (Interviewee 14, Study 2). The ethos of the group was based on the importance that all members could contribute equally and have the potential to add to the body of knowledge. Group solidarity provided a strong basis for empowerment. The user group had representation at project team meetings. Additionally, within the confines of the group, members felt empowered to make suggestions in relation to improving e-services: “[Referring to the user group] many feel [that] they can make a positive contribution to the project” [E2] (Interviewee 2, Study 2). Egalitarian values of empowerment were a contributing factor in the co-production of knowledge within the group. For instance, members shared important information relating to e-services, in terms of how it can best be used, deployed, and implemented within the council.

**6. Discussion**

To recap, the aim of this study was to explain, using the ways of life proposed by cultural theory, the social relations and dynamics within the local council over time that affected the ability toimplement and manage the e-services project. While Malaysian culture is hierarchical in nature (Hofstede 2010; Mansor and Tahib 2010; Wong et al. 2009)—driven by bureaucracy, rules, and characteristics of power and control—our analysis goes deeper by also illuminating the fatalistic, egalitarian, and individualistic (self-interest) nature of culture in e-government.

 More specifically, by using a multi-level approach to analyze culture, this study found evidence of fatalism and hierarchism at the organizational and subgroup levels, egalitarianism at the subgroup level, and individualism at the individual level. Hierarchism, fatalism, and individualism were found to be the strongest, particularly during the initial years of the e-services project; however, the study also identified the emergence of egalitarianism as the project progressed. Hierarchism was a prevalent feature of the council and in the context of the e-services project fostered an environment devoid of commitment from lower levels, which made the implementation and management of the e-services project difficult. Disengagement due to hierarchism was attributed to heavy reliance on rules, limits, and bureaucratic customs. Other studies (Hasan and Ditsa 1999; Kaarst-Brown and Robey 1999; Jackson 2011; Ruppel and Harrington 2001; Tolsby 1998), have found that hierarchy (coercive as opposed to enabling) can have a detrimental impact on IT project attainment. Kaarst-Brown and Robey (1999), in their ethnographic study of Seeuac (a large insurance organization), found that a highly hierarchical culture disheartened lower levels from putting ideas forward, leading to an environment lacking in managerial support and commitment. In their study of organizational culture and intranet implementation, Ruppel and Harrington (2001) found that bureaucracy confined to senior management can greatly hinder knowledge sharing, creating a low-trust environment that cascades throughout an organization.

 The study also found that fatalism fostered a hampering environment throughout the council, for instance, operator withdrawal and apathy towards the e-services project. Disengagement associated with fatalism was due to operators feeling fragmented in a social context in which they had very little say. While fatalism is less frequently considered in organizational studies, researchers (Jackson and Philip 2010; Wong et al. 2009) have acknowledged the challenges that fatalism can create, particularly in introducing change initiatives. Jackson and Philip (2010), for instance, found that fatalism among lower levels of staff greatly impeded the uptake of ICT within an organization, fostering an insular environment that did not support change. Referring to the case study, the presence of fatalism, particularly during the initial stages, fostered lethargy and a general unwillingness of operators to abandon their traditional modes of operating.

The findings also revealed that individualism, due to its qualities of self-interest, can lead to individuals seizing (or attempting to seize) opportunities to their advantage—as in the case of external IT consultants. Similarly, a number of studies have found support for the nonconformist nature of consultants. Robertson et al. (2000) in their study of the diffusion of computer-aided production management in the automotive sector, found that the individualistic nature of consultants resulted in them being “selective” in terms of the knowledge that they shared with other organizational members. Heeks (2003) also illustrated the problems associated with e-government consultants, particularly with their mentality of seeking “quick fixes” in software development. In the council, consultants put their individual needs before the interests of the group, resulting in a mentality of dissent, whereby they did not always comply with the group as a whole. This attitude promoted an environment where consultants took shortcuts in software development, leading to poor design and testing practices that had cost implications when implementing the software needed to provide e-services.

Our study also found evidence of the emergence of egalitarianism at the level of the user group. Members were less constrained under a gridiron of rules and regulations in terms of what they could and could not do. A strong sense of solidarity existed among group members. This was beneficial to the project, as the group became a highly valued medium for sharing important project information and voicing opinions. Egalitarianism promoted a high degree of trust [or more aptly *reflective* trust rather than *blind* trust (Adler 2001)] and facilitated interdependence between the members of the group and knowledge sharing. The emergence of egalitarianism occurred as a result of changes to the dynamics of the project team subgroup, for instance, the appointment of a new chairman who was more accepting of the idea of a user group, as well as reconfiguring the roles and responsibilities of project team members.

It cannot be claimed that other government councils (or indeed organizations) will pass through the same ways of life illustrated in this study. Any sequence is possible. It may even be the case that several ways of life may be evident, perhaps simultaneously, at any given point in time—as found in this study, for instance, some operators were supporters of fatalism but also endorsed values of egalitarianism as part of the user group. The follow-up study revealed that the council has made good progress in regards to the e-services project. As of 2013, the council had implemented all the necessary software, technology, and infrastructure needed to provide e-services, all of the planned e-services (e-forum, e-complaint, e-compound, e-assessment, e-licensing, e-submission, and e-rental) had been introduced, the council had made moderate gains in improving efficiency and effectiveness in using ICT, and operators were more committed to the e-services project. A summary of the key events within the council is illustrated in figure 3.

*INSERT FIGURE 3 HERE*

Although we cannot provide evidence that changes in culture promoted a more favorable environment to e-services, cultural theory nevertheless serves as a fresh approach to addressing identified gaps in the e-government culture literature. The theory opens new pathways, particularly the multileveled, dynamic, and fragmented nature of culture—areas that have been poorly understood or defined in e-government research. Thus culture may have greater levels of ambiguity and temporality than have been previously considered in e-government research. Additionally, while we are cautious to offer generalizations based on one study, it is likely that organizations will embrace the ways of life proposed by cultural theory across different levels, to varying degrees, and some are likely to be more critical or have greater impact than others, at different points in time.

**7. Conclusions**

Although on the surface the adoption of ICT to support e-services may signal wide-scale uptake, the transformation from government to e-government is not a straightforward task. Viewing e-government from a cultural theory perspective, this study raises a number of theoretical implications.

Firstly, culture at the organizational, subgroup, and individual levels can influence the management and implementation of e-government (e-services). Rather than solely viewing culture at the organizational level, it is argued that culture needs to be viewed across different levels in order to understand it fully. This concept is similar to the old Indian fable of the three blind men who were asked to determine what an elephant looked like by touching different parts of its body. The one who clutched the tail described the elephant like a rope; the one who gripped the leg thought it resembled a pillar; and the one who seized the trunk suggested that the elephant resembled a branch of a tree. The moral of the story (in relation to the study of culture and e-government) is that by only viewing culture from one level, we fail to understand the complete picture.

Secondly, current studies can be compared to an iceberg—there has been a tendency for existing studies and approaches to observe characteristics of culture that lie above the water’s surface. One instance of this is examining e-government outcomes and linking outcomes to a rather vague representation of culture. Cultural theory allows us to probe below the surface of the iceberg and understand the reasons for observed differences and the dynamism that lies between cultural types.

Thirdly, given the cultural issues that occurred over time and continue to exist, as found in our study, the theory highlights the perils of top-down technological-deterministic and managerial-driven accounts of change. An ICT and cultural change program, in itself, rarely works in the short-term; instead, culture is something that is constructed and reconstructed as people respond to the changing events around them. From a practical viewpoint, it is imperative for practitioners and managers to be aware of the pluralistic forms that culture can take, as well as being attuned to its subjective and dynamic nature. Cultural theory can serve as a very effective framework to analyze and explain the cultural differences and dynamic tensions that might arise during major government change initiatives.

The study is not without limitations. The study was retrospective in nature, asking interviewees to recall and reflect on past events based on two key points in time. Perhaps conducting interviews at every stage throughout the implementation lifecycle would have provided a more insightful understanding of how events unfolded in the council. However, this approach was largely unfeasible, given that the e-services project had already commenced during the first data collection cycle. The theory also has limitations; although four ways of life are recognized, there are likely to be other ways that influence ICT-based change. Additionally, utilizing the theory from a qualitative position, while useful for capturing the ways of life in kind, fails to capture differences in degree.

Within e-government cultural studies, there is an increased need to comprehend and distinguish the multiple realities surrounding e-government, as well as to further understand their impact and dynamics. Using cultural theory, further studies could examine some of the following questions: Do any of the ways of life have a more detrimental impact on e-services project success than others? Are there particular contexts in which configurations are likely to adapt/change differently? How and why do ways of life materialize and unfold over time? Studies could also further examine how contextual factors (history of an organization, type of leadership, age of staff, IT maturity level, type of environment in which the firm operates) influence organizational culture.

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Figure 1. Cultural theory (adopted from Jackson, 2011)

**Fatalism**

Powerlessness Passivity/apathy Isolation

Grid +

**Hierarchism**

Rule-bound Power/control Bureaucracy

Group +

Group -

**Egalitarianism**

Equality Empowerment Informality

**Individualism**

Independence Enterprising Self-interest

Grid -

Table 1. E-government challenges linked to cultural theory assumptions

|  |  |
| --- | --- |
| **Research challenge in e-government** | **Cultural theory assumptions** |
| Tendency for studies to analyze culture at the organizational level (Wong et al. 2009) | Culture can be analyzed across multiple levels (e.g., organizational, subgroup, and individual) (Jackson 2011) |
| Relatively few e-government studies have utilized frameworks from a dynamic approach (Jackson et al. 2007; Wong et al. 2009) | Ways of life are in a state of dynamic tension  (Douglas 1999; Thompson et al. 1990) |
| Problems associated with technological determinism/managerial logic to cultural change (Gil-Garcia et al. 2014; Heeks and Bailur 2007; Maniatopoulous 2005) | Culture is perceived as socially  constructed in human action (Jackson 2011) |

Figure 2. Council structure



Table 2. Summary of respondents

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Interviewee** | **Interview Type** | **Sex** | **Position** | **Study 1 participant** | **Study 2 participant** |
| 1 | Formal | M | IT Manager | Y | Y |
| 2 | Formal | M | Assistant IT Manager | Y | Y |
| 3 | Formal | M | Operator  | Y | Y |
| 4 | Formal | F | Operator | Y | Y |
| 5 | Formal | M | IT Receptionist |  | Y |
| 6 | Formal | F | Finance Manager | Y | Y |
| 7 | Formal | F | Assistant Finance Manager | Y |  |
| 8 | Formal | F | Management Services Manager | Y | Y |
| 9 | Formal | M | Business Control Department Manager | Y | Y |
| 10 | Formal | M | City and Urban Planning Manager | Y |  |
| 11 | Formal | M | City Service Department Manager | Y |  |
| 12 | Informal | M | Operator | Y |  |
| 13 | Informal | F | Legal and Enforcement Manager |  | Y |
| 14 | Informal | M | Operator |  | Y |

Table 3. Summary of stakeholders involved in e-services project

|  |  |  |  |
| --- | --- | --- | --- |
| **Stakeholder** | **Level**  | **Composition**  | **Role** |
| Project team | Group | Departmental managers, the chairman, council representatives | Coordinate and manage the e-services project |
| Third party vendors | Group | Several computer suppliers | Supply hardware, software, and other infrastructure to support the project |
| External consultants  | Individual (were not perceived as being part of a group)  | Freelance, external specialists employed on short-term contracts | Assist in the design, testing, installation, and maintenance of e-services  |
| Operators | Group  | Staff employed in the local council  | Used ICT in order to provide e-services |
| User group  | Group  | Subset of operators  | Share experiences in relation to using and improving e-services |

Figure 3. A timeline of key events within the council

Operators did not commit to ICT systems

Head of IT position made permanent

E-forum, e-complaint & e-compound introduced

User group set up

Additional ICT implementation

Chairman’s position renewed

New chairman appointed

Operator training provided

Decision made to review existing systems

 **2003 2004 2005 2006 2007 2008 2009 2010 2011 2013**

New head of IT appointed

Use of ICT for e-services perceived as normal activity

New secretary appointed

Infrastructure, hardware, & software improvements

A number of groups set up to coordinate e-services project

Review of additional ICT implementation

E-assessment, e-licensing, e-submission, & e-rental introduced

Upgrading of website from static environment

1. Menard (2002) encompasses “longitudinal” as a broad term, defining it as research in which a) data for each item are collected over two or more distinct time intervals, b) the cases or subjects under investigation are the same or comparable from one time interval to the next, and c) the investigation entails some comparing of data between or among time intervals. [↑](#footnote-ref-1)