Culture Collideation in Digital Government

Wini Prastuti[1]

Gabriel Lele[2]

Yeremias T Keban[3]

Abstract

This article focuses on the implementation of e-government as a form of digital government in the context of cultural theory. This is important since cultural analysis has not been discussed much in the topic of e-government stages. The success of e-government implementation is evaluated through stages that produce key determinants/success factors. The study of determinants in the e-government stage often carried out is in the managerial and organizational capacity. Although rarely mentioned, cultural variables are important factors in the development of the stages of e-government. Grid-Group Culture Theory is used to analyze variations in values by applying two dimensions, grids and groups, and leads to four ways of life: fatalism, hierarchicalism, individualism, and egalitarianism. The results of the article concluded that there is cultural collideation in e-government. It occurred as the result of differences in the cultural nature brought by ICT. In this case e-government which is more directed towards individualism and egalitarianism. These trends collide with an organizational culture.

Keywords:
e-government, organizational culture, determinant, cultural theory, ICT

Introduction

This article is carried out with a literature review related to the cultural context in the implementation of e-government as a form of digital government. Although there is an importance of studying the cultural context in the implementation of e-government, there is a limited research available that relate the cultural dimension in the stages of e-government development. The necessity to pay attention to the cultural factors at the implementation stage of e-government was acknowledged by several researchers (Siau & Long, 2005;

[1] Department of Management and Public Policy, Faculty of Social and Political Sciences, Universitas Gadjah Mada
Email: winiprastuti@ugm.ac.id
[2] Lecturer at Departement of Management and Public Policy, Faculty of Social and Political Sciences, Universitas Gadjah Mada
[3] Lecturer at Departement of Management and Public Policy, Faculty of Social and Political Sciences, Universitas Gadjah Mada

Wachira, 2012; Choudrie et al., 2017). This is in line with what Moon & Norris (2005) shows that the absence of research that reveals cultural factors is indeed quite surprising. Opinions from some of the researchers are supported by the results of Nurdin, Stockdale, & Scheepers (2010) which said that cultural characteristics (such as adaptability, involvement, mission, and bureaucracy) contribute to the adoption process of e-government. In contrast, Patel & Rajendran (2005) states that cultural factors together with economic factors do not actually have a significant impact on the role of service integration in the implementation of e-government in Jordan.

Therefore, e-Government development implementation is measured through stages which then produce determinants (Layne & Lee, 2001; Moon & Norris, 2005; Rahman et al., 2014; Bayona & Morales, 2018, Siau & Long, 2005). These determinants include financial resources and Gross Domestic Product (GDP); socio-economic factors, such as wealth, level of education, and technology access; and political factors, including the significant role of elected officials in e-government initiation (Manoharan 2013; Ingrams et al.,2018). Studies have shown how economic and technological factors have a positive and significant relationship on the development of e-government at the national level (Domínguez, et al. 2011; Moon & Norris, 2005). Economic factors are also discussed in studies by La Porte et al. (2002) Moon & Norris, (2005) and Siau & Long (2005), which show that national income or wealth influences government responses to citizens' demands for information and services. Melitski et al. (2005) find a mutual relation between urban e-government adoption and city locations in more developed countries. Although some researchers have found that the success of e-government is determined by technological and economic factors, Dasgupta and Gupta (2005) identify cultural elements that contribute to the adoption and use of e-Government. Transferring technology from developed countries to developing countries or from private to public organizations also causes cultural gaps that need to be overcome (Heeks, 2002).

The existence of variations in e-Government is indicated by the results of the evaluation of the implementation and stages of e-government. The UN carried out globally survey on the implementation of e-Government by issuing a UN E-Government survey. The UN E-Government surveys, which is issued every 2 years, have different focuses. The latest, 2018 survey focused on e-Government as a tool to build a resilient and sustainable society.

The highest e-Gov Development index was achieved by Denmark with an index of 0.1950 and the highest e-Participation index is achieved by the Republic of Korea with an index of 1,0000. While Indonesia is ranked 107th with an index of 0.5258, it is still below Malaysia which is ranked 48th with an index of 0.7174 (UN E-Government Survey, 2018).

In the Indonesian context, the rank method is carried out in the context of evaluating the development of e-Gov in Regencies/Cities and Provinces throughout Indonesia. The ranking is carried out by the Ministry of Communication and Information Technology (Pemeringkatan e-Government Indonesia or PeGI), the Ministry of PANRB (SPBE in 2018), and the Office of Communication and Information Technology in the Regional Government (Central Java). In addition, the ranking is based on the stages of development carried out by several researchers, including Yunita and Aprianto (2018).

From the description above, it is recognized that the implementation of e-Government still has several problems and constraints, which are evidenced by the variation of values. This implementation problem has been discussed in several studies which revealed the success factors of e-Gov, which talked about capacity factors (economics and technology). While some researchers revealed the importance of cultural factors in adoption and implementation (national and local), in this case, it is still rarely discussed.

Culture becomes a useful asset for the organization if it supports the mission, goals, and strategy of the organization (Denison, 1996) and plays an important role in many aspects of the organization (Wallach, 1983). Culture plays a role in the statement of mission and organizational goals and indirectly shapes behavior (Denison & Mishra, 1995). Through organizational culture, individuals in organizations gain a shared understanding of their organization's core mission which leads to the development of consensus on how they will achieve organizational goals. Thus, bureaucratic culture is often considered to be the key to bureaucratic success in facing increasingly complex future challenges. Bureaucratic culture in a hierarchical government is allegedly at odds with the egalitarian culture brought by ICT, causing cultural collideation. The Cultural Typology of the Grid-Group Theory of Culture (G-G) Douglas (1978) was used to identify the cultural collideation.

Methods

This paper used literature review method. According to Shuttleworth (2009) Literature review or narrative review is a critical and in-depth evaluation of previous research. Literature reviews were done by review scholarly papers that include the current knowledge of the topic chosen. Articles, books, thesis, and documents were used as a source in writing literature review. There were several steps and methods in this research. The first step is to sort the literature, and then grouped and coding the article according to the research topic. Content validity is done by comparing several articles that have similar content.

Results and Discussion

Culture Typology in Organization

Organizational culture shapes the personality of the organization through the socialization process of people in the workplace of the organization (Schein, 2010). According to Schein (2010), elements of organizational culture can be divided into artifacts, espoused values, and basic underlying assumptions. Artifacts are the most visible and tangible elements of organizational culture, such as computers (laptops/PCs), networks, telephones, air conditions, televisions. Espoused values relate to the beliefs and rules expressed by organizations through strategy, philosophy, and goals. Finally, the basic underlying assumptions, including conventions, thoughts, and feelings held in high esteem, are something that they have since their birth. Douglas (1970) states that "Culture is presented as a dialogue that allocates praise and blame. Then focus particularly on blame ". Cultural bias has its own framing assumptions, and assumptions available to respond to standard problems. This makes culture important for maintaining reality. Culture is presented almost as a tool for problem-solving in the face of individual action limits.

Grid-Group Culture Theory (Douglas 1970, 1982, 1992; in Thompson et al. 1990) abbreviated as G-G is used by several researchers such as Simmons (2016) and Jackson & Wong (2016) as a tool for understanding cultural diversity. Hood (1998) says that G-G is increasingly being used in institutional analysis across social sciences. In some cases, G-G is more suitable for analysis because it can support researchers to justify against the opinion that hierarchy is a top-down bureaucracy, a form of government oppression, and cannot be

justified politically (Douglas, 2004). Grid - Group is an analysis using the typological paradigm put forward by Douglas (1970) to compare cultures and forms of social organization that supports the existence of organizations. The roots of the G-G are two basic dimensions of social organization: social regulation (refer to the 'grid') and social integration (refer to the 'group'). G-G is able to show how changing inputs (organization, environment) and throughput (communication, appreciation) will produce optional output (Thompson et al. 1990).

1. Group

Groups are in the horizontal coordinates. Group refers to the extent to which members are taken and supported by group actions (Douglas & Wildavsky, 1983). Group represents the extent to which people are driven by or limited by thoughts and actions by commitments to social units or individuals. In a "strong group" setting, members will be forced to act in accordance with the group's collective interests. Conversely, in a weak group environment, individuals are less obliged to act in the interests of the group. Strong Group means group members spend a considerable amount of time interacting with other members of the unit. Conversely, the emphasis on 'do it my way' also makes it easier for interactions (networks) to be optional, rather than normative (Altman, 1998). To measure group strength, Mars (1982) proposes four things: frequency, mutuality level and scope of interpersonal interaction and tight group boundaries (inclusion/exclusion). A weak group can be found when people negotiate through their way of life for personal gain, without being bound by, or dependent on, one group of others.
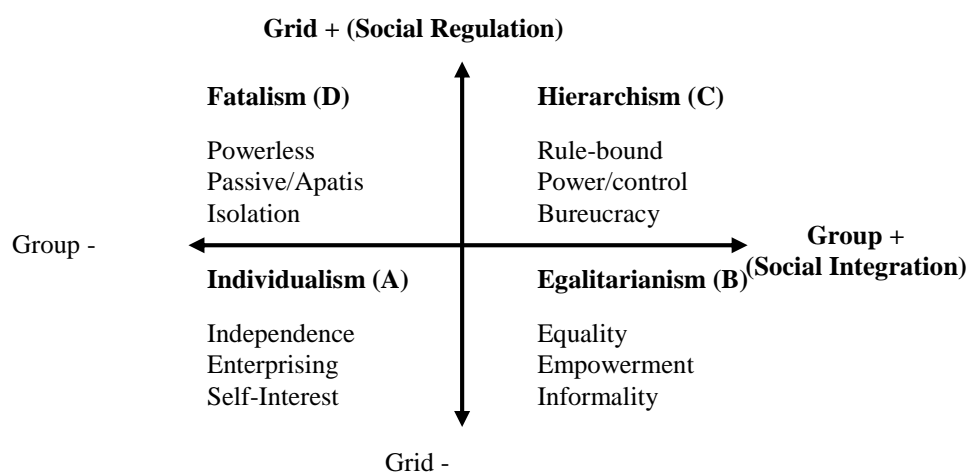
2. Grid

Grid is shown in vertical coordinates. Grid is a collection of constraints of social interaction outside the context when individual behavior is limited by the differentiation of normative roles. The grid is considered "strong", each time the role of individuals in the organization is distributed based on explicit public social classifications, such as gender, skin color, position in organization hierarchy, offices, descent (based on clans or lineage), and ranking of people through the age system (seniority). The grid is categorized as a "weak" when the classification does not limit the range of social choices or activities that are open to everyone. The "weak grid" social environment is a place where access to roles that refer to formal and negotiated rules depends on personal

abilities, skills, qualifications. In conditions where access to roles does not depend on any characteristics ascribed to rank or birth, the grid will be categorized as "weak grid". Each quadrant represents a cluster in the "grid and group" factor.

The quadrants in this cultural theory are used to determine the next step in measuring cultural types. If two dimensions of social relations, grid and group, are directed at the axis of the axis it will lead to four ways of life: fatalism, hierarchism, individualism, and egalitarianism (see figure 1.1).

Figure 1.1
Grid-Group Culture Theory Framework

Grid + (Social Regulation)

Fatalism (D)	**Hierarchism (C)**
Powerless	Rule-bound
Passive/Apatis	Power/control
Isolation	Bureucracy

Group -   **Group +**
                                                   (Social Integration)

Individualism (A)	**Egalitarianism (B)**
Independence	Equality
Enterprising	Empowerment
Self-Interest	Informality

Grid -

Source: Adopted from Jackson (2011)

According to Jackson & Wong (2016), the four quadrants are compositions, which allow the characterization of differences to be marked. Each quadrant could be explained as follows:

1. Quadrant A (Individualism), located in the lower left. This quadrant is characterized by weak group character and weak grid regulation. This quadrant represents a social context that is dominated by highly competitive conditions, turbulent circumstances, and free individuals. In the sense that individuals are free to enter any area and carry out any transaction with anyone they wish. The limits are only temporary. They are relatively free from control by other members, but their control of members depends on their position on the grid. Individuals will cooperate only with individuals who have helped (tit-for-tat strategy). In organizations that are entirely individualistic, employees will pursue profits without respecting the law or personal integrity (Evans, 2007). This

pattern is then justified by pursuing a position or personal appreciation in a competitive environment. Everything in this type of culture can be negotiated (Altman & Barauch, 1998). In this quadrant, the individual has optimal options for contract negotiations. In the culture type of individualism, each person is responsible for himself and for whoever he chooses. Nobody cares about someone's past, ancestry, or family. The definition of error is a personal failure or caused due to a lack of competitive conditions. While justice is equality or equality in opportunity. Organizing in this quadrant is vulnerable to egoism and lack of cooperation because individuals are free to act for their own benefit. (Mamadouh, 1999).

2. Quadrant B (Egalitarianism), located in the lower right. This quadrant has the character of a strong group boundary (strong group), combined with weak regulation (weak grid). Egalitarianism is characterized by collective decision making (Jensen, 1998; Smullen, 2007), where group interests are prioritized over individual interests. The main idea of egalitarianism is that all individuals are the same (Breed, (2007) in Wouters and Maesschalck (2014)), where justice is interpreted as equality. Egalitarianism is dominated by education, so that inequality through rank, gender, age, and authoritarian leader is eradicated. This makes this type of culture vulnerable to a deadlock in problem-solving, because there is no shared authority to resolve internal conflicts (Thompson et al., 1990). Egalitarian culture is preserved by maintaining a strong barrier between members and non-members which leads to our-versus-them attitude and distrust of outsiders (Breed, (2007) in Wouters and Maesschalck (2014)). The existence of groups is maintained through intensive relations between members. Errors that occur are considered errors in the system.

3. Quadrant C (Hierarchism) is in the upper right, and close to the term collectivism. This quadrant is a social environment that is characterized by strong group boundaries and strong rules. In this quadrant, there will be a strong preference for bureaucratic rules, power, and habits. This is the result of a clear division of labor, in each of the different roles, and leads to a firm hierarchical relationship. The uniqueness of this quadrant results from the justification of the group, namely the interests of the group over the parts, and the collective interest of the individual. In this quadrant, everyone knows their position, and how they have to behave according to the position. Age, seniority,

gender, and education are considered important in positioning one's role. Individual existence is obtained at the expense of open competition and social mobility. Justice is defined as equality in law while the error is defined in violation of established procedures. This way of organizing is vulnerable to trust in the wrong place in authority and expertise. Bureaucracy is one of the examples of this type of social organization when it that bases its role in the organization based on seniority rather than on merit system. Beyond bureaucracy, this type can be seen in cohesive tribal societies with a hereditary role.

4. Quadrant D (Fatalism), the quadrant in the upper left is a combination of conditions in the weak group or "weak group" and strong rules "strong grid". Members feel that their actions are mostly controlled by others (strong grid) and view themselves as members of the marginal community with a limited voice (weak group). Actions taken by individuals do not represent group interests. They assume there is no justice in the world (apathetic). This way of organizing is vulnerable to an unwillingness to plan ahead or inertia. Fatalism is a social context in which external group boundaries are usually the dominant consideration (Jackson & Wong, 2016). All other aspects of relations between individuals are ambiguous and open to negotiation. Leadership tends to be charismatic and does not have clear rules for succession. Individuals tend to be suspicious by outsider infiltration or betrayal by group members. A bureaucratic environment can occur in highly unionized civil or industrial services where promotion is based on the length of the service provider rather than competent on competence.

Bureaucration and e-Government Culture in Organization

The main approach in organizational culture research is functional and interpretative. Organizational culture from the functional side is seen as objective, with the main focus of generalizing with a large sample. The theory used in the functional approach usually uses the Cultural Theory developed by Hofstede (1991), where culture is seen as static in a certain time, homogenous and overriding cultural pluralism. On the other hand, in an interpretive approach, organizational culture is accepted as subjective, socially formed from human awareness and interaction in a group (W.M. Seng, et al, 2010). In understanding culture, Hofstede, (1991) said that culture is like an onion, a system that can be peeled, layer

by layer to remove the deepest layers. The essence of culture is a "value", which is a deep conviction about how things should happen. From the outside, it cannot be directly seen how penetration is done at this level. Although inference can be obtained from the story and language used by members of the organization. The value itself according to Hofstede, (1991) can be drawn from these three layers, namely: symbols, icons, and rituals. Symbols can be meaningful images/objects. Icons are interpreted as personnel/actors who are admired by a group of people. While the way to show admiration, trend or behavior is included in the ritual category.

Culture is the vast theme most often raised in the realm of information technology (Leidner & Kayworth, 2006). In the context of communication, Hall (1976) divides cultures according to the way they communicate, in higher contexts (much-implied information) and low contexts (almost all explicit). In practice, these differences overlap largely with traditional versus modern differences. Although often overlooked, the role of organizational culture in assimilating new technology is significant (Iris-geva May, 2002). Difficulties in conceptualizing and implementing cultural construction in the success or failure of assimilation of new technologies.

Weber & Pliskin (1996) had declared that "Bureaucratic culture refers to clear lines of responsibility and authority based on control and power". In line with that statement, Wallach (1983) argues that organizations are managed with explicit rules that are strong, hierarchical, cautious, solid and procedural, where they work systematically and organized in an environment where responsibilities and authority are on clear paths. This is in accordance with organizations in the government environment where bureaucratic culture can achieve stability. Increased technology adoption is due to well-integrated government organizations through rules, hierarchy, and stability.

Organization member at higher levels establish policies and goals, and then communicate with lower levels or subordinates who are required with responsibility for taking the necessary actions (Ouchi, 1981). In this way, hierarchy gives legitimacy to more senior people to direct subordinates to follow the desired orders in carrying out organizational tasks. In organizational social relations, hierarchical relationships are understood as instruments to coordinate and determine the power and status among people (Mahoney, 1979). Through coordination, people can work together to complete tasks that are

divided according to their roles. In the context of coordination, people are interdependent and work together in achieving organizational tasks that involve identifying goals, transferring objectives to activities, assigning activities to people, and managing relationships (Malone & Crowston, 1990). As a result, organizations are solid and well-structured because the member in the organization has clear authority, responsibilities and work within the organization.

Bureaucratic culture has 4 (four) indicators used by Turnip (2009) in his research, namely: Uncertainty (uncertainty avoidance) and Power Distance (taken from Hofstede, 1990), Client Patron and Egalitarian. Patron-Client Culture is ultimately the most influential factor in the implementation of ICT in Public Organizations (Turnip, 2009). The use of ICT in organizations is expected to reduce power distance because the process automation makes anyone who is far from power have the same access. Behavior and views of bureaucrats towards ICT also influence its implementation. The view that ICT in this case e-government can help work, makes bureaucrats support its implementation. So they feel they can reduce uncertainty (uncertainty avoidance). On the contrary, they see ICT as a threat to their existence in the organization.

Besides being naturally hierarchical, public organizations consist of various cultures that are brought by each individual in the organization. However, the organization has the power to control its members to act for the sake of groups or organizations. Conflicting values among organizational subcultures hinder the sharing of information and collaboration needed to effectively implement integrative technology. This finding shows the potential contradictory consequences of IT implementation because of the competing cultural values among organizational stakeholders (Huang, et al 2003).

Organizational culture that characterized as hierarchical, standardized rules, and rigid structured does not have the power to take risks in making decisions, therefore become ineffective. In these kind of the organization's culture its members have the low commitment, and are less competent, and technology that is part of innovation will be difficult to develop. Davenport (1994) illustrates the need for open, flexible, and broad cultural information for easy implementation of technology. Likewise, Ruppel & Harrington (2001) and Sawy et al. (2001) propose cultural development that encourages trust and

knowledge sharing. Sloan & Green (1995) emphasized the importance of culture in supporting the inclusion of new technology in organizations.

Schein (2010) categorizes Culture into 4 (four) groups: Macrocultures, Organizational Cultures, Subcultures, and Microcultures. Macroculture, and the various work groups that make up an organization, which can be considered a subculture. Jobs, such as medicine, law, and engineering, for some purposes, can be considered as a macroculture. There is also a growing interest in culture in the form of small units in the organization, units such as the budget department, the accounting department, the program section or the task force that crosses different work groups from the occupational subculture. Such organizational units are increasingly referred to as micro systems that have microcultures.

Discussion

E-Government is a representation of ICT adoption in government organizations. ICT was born as a tool to improve the quality of work to be much better, faster and more precise. The nature of this ICT makes the barriers formed by the hierarchical pattern become thin and may even be eliminated. For example, with a permit application, tax payments do not need to go through several procedures and can be completed in one day. These patterns of working procedures will tend to form an egalitarian culture. The conditions that characterize egalitarianism are equality in the organization (equality), empowerment of all employees/members (empowerment), and information disclosure between members and outside the organization (informality). ICT is more as a target organization in which the needs are implemented partially. For example, the e-budgeting application is first launched before other sub-systems, even though the need for ICT is system integration.

Otherwise, ICT tends to make a person more individualized, because with an established system, automation will make someone less related to one another (self-interest), they are focused on working on each other's targets (independently). In addition, because of the high target demands, they tend to prioritize profits, higher than expenses compared to serving the needs of the group. The advantage in this case is related to work effectiveness. So it can be concluded that organizations that apply ICT are organizations with high levels of support and innovation.

Bureaucratic organization culture is formed through an effective process. And hierarchy was used in the chain of command. This organizational model gives clarity to the organization and its members to carry out tasks and influence their behavior according to explicit rules and formalization in order to offer internal efficiency. This is consistent with the opinion of Lee and Kwak (2012) and Goodsell (2015) that bureaucratic culture is associated with hierarchy, specialization, and uniformity. Matters related to writing rules, procedures, norms, standards of behavior, and communication are rules that are explicitly formalized. Explicit formal rules can be an effective means of achieving coordination and integration within an organization because the organization and its members are bound by regulations.

Bureaucracy and ICT have their own cultural characteristics. The culture in Douglas's terminology collides in a quadrant. Bureaucracy with structural features is clearly in the Hierarchical quadrant. Meanwhile, ICT requires a new model in the bureaucracy that requires an egalitarian culture and more rational decision making, no longer rigid hierarchical. Work relations between sub-units become participants and are no longer command. Bureaucracy allows someone who is far from the group to be in a position of fatalism, while ICT with all its speed, efficiency and effectiveness makes individuals not really need the role of others (Turnip, 2009).

Individuals in organizations tend to be in the "Individualism" quadrant. Members of the organization already have sufficient capacity (professional) to complete their work. The organizational structure using the ICT system will be leaner, more flexible, agile and has certain specializations according to the job description. Because of these cultural differences, ICT tends to be difficult to enter into the bureaucratic culture. Strong leadership, stakeholders who support ICT, will ultimately have a positive impact on the implementation process. With a clear command, the bureaucratic culture will be effective in implementing ICT. Danang (2011) mentions that stakeholders have a very important role in bringing up e-culture. In Patel & Rajendran (2005) e-culture research is one factor that supports the adoption of e-Government.

Hierarchism has an approach through command and control. This can stifle creativity, foster dissatisfaction and eliminate employee motivation (Adler & Bory 1996). Hierarchical values that focus on formal control at a higher level of management are

conducive to radical innovation because they give management more power to implement change (Ettlie, Bridges and O'Keefe, 1984; Dewar & Dutton, 1986). Unlike other ways of life, individualism allows one to see opportunities. Individualistic members can avoid risks that they consider impossible to bring rewards or benefits to the organization (Hood 1998). Because of its nature, individualism can create a climate where individuals can abuse, and exploit IT for their own benefit.

Altman & Barauch (1998) compared two organizations namely the Armed Forces representing groups with strong grid structures and strong groups (Hierarchism) which are dominated by regulations. Hendry's study (1999) in the post-industrialization period, suggests that organizations will need a combination of three possible cultural orientations, namely hierarchism, individualism, and egalitarianism for the successful implementation of E-Government services. Whereas the research conducted by Jackson & Wong (2016) proves that all four types of culture are present and coloring in the process of implementing e-Government.

Wong, Jackson, and Philip (2009) noted that "The main concern in the research on e-Government culture is that the approach taken is usually to equate culture with an organization. Wong then declared that, a potential problem with this view is that it ignores the fact that organizations can consist of subcultures, which can have an impact on the use, implementation, and management of e-government projects. Subgroup differences are part of e-government projects and must be considered in cultural analysis. Several scholars (Gasco 2007; Helbig et al. 2009; Jackson & Philip 2007) have recognized that subunit differences are very much a part of e-government projects and must be considered when analyzing culture even though it is less prevalent in e-government research. In his research, Van Maanen & Barley (1984), revealed disputes between units caused by differences in values carried, perspective used and culture within the organization itself. Emphasis on the cultural differences of each of these sub-units then becomes a conflict or collaboration driver.

In another view, sub-unit is considered to have a uniform culture from its parent organization. Because after all the sub-units that exist in an organization have a unique element which is then carried by each element of the organization (Alpert & Wheten, 1985). This is consistent with the Culture Clashes Sub Unit revealed by Cameron & Quinn (2006) as a culture collideation in different organizational subunits. The uniqueness in each subunit in
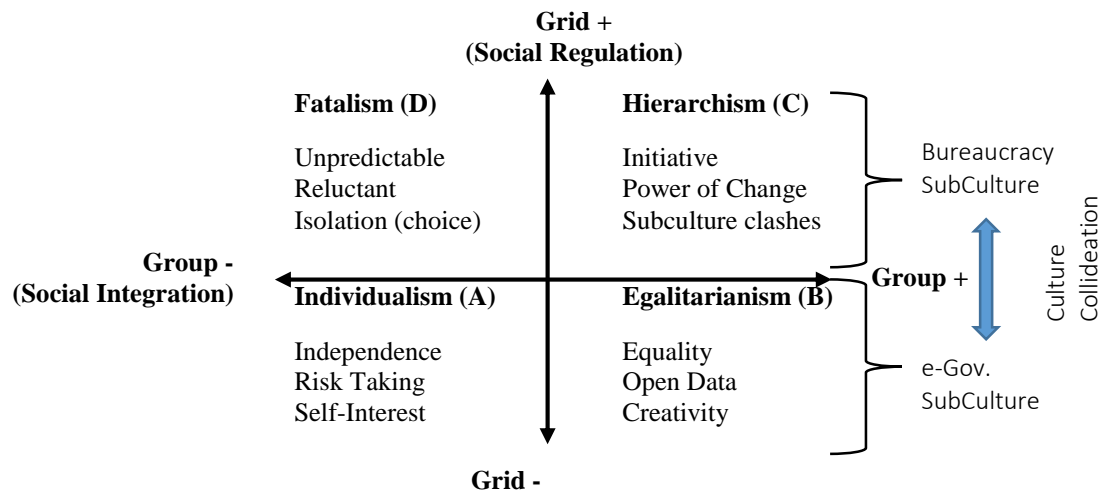
the organization is one that is discussed in Culture Clashes. Cameron & Quinn, (2006) states that, "Organizational culture is reflected by shared values, leadership styles, symbols and language, procedures, routines and success definitions, each of which will create its own uniqueness for the organization. In organizations, especially public organizations, there are subunits with strict and clear vertical and horizontal boundaries. Difficulties in coordination and integration processes in organizational activities are often the result of cultural collisions between subunits. This culture collision also occurs between the nature brought by e-government with the organizational culture that exists in each sub-unit.

Cultural differences in subunits, for example, can be seen in the IT team in organizations. The IT team tends to be more egalitarian, providing an environment conducive to the emergence of new innovations, free of expression and creation, wide and free space to be creative, flexible, risk-takers. On the other hand, in the financial sub-unit, organizational culture as part of the bureaucracy, has a culture that is conditioned to keep silent and not much to talk to another subunit. This condition is structured based on highly confidential data that must be kept on the financial subunit. Financial and accounting principles, such as prudence, are shared values that they uphold.

The G-G theory developed by Douglas (2004) is actually useful as an explanatory theory, namely empirical classification in the framework of theoretical validation and typology that underlies the classification and strung together in framework theory. Therefore, if we just classified the organization culture, it will be useless. Because, after all, there will be an opinion that without doing the classification by the Grid and Group frame, the organization will still running. However, empirically this classification is needed to strengthen the theory so that it is no longer just a myth. Fatalist, latter is called as an unpredictable nature and hierarchical is an imperfect human nature but can (or mostly) be covered by good institutions, while egalitarian is a good human nature and is thought to influence institutions. Mamadouh (1999) identified three problems arising from this theory, coherence, scale, and individuals as carriers of cultural biases. The first problem is that of the difference between levels (relationships, biases, and behavior). GG has proven much stronger in policy analysis and public administration to identify competing arguments and conflicting strategies, to produce competitive scenarios to assess problems and design policies to explain and predict failures (Hood, 1996; Hood, 1998). A Framework was made to

make a clear perspective about culture collideation between bureaucracy and e-Government (see Figure 2.1).

Figure 2.1.
Culture Collideation in G-G Framework

Grid +
(Social Regulation)

Fatalism (D)

Unpredictable
Reluctant
Isolation (choice)

Hierarchism (C)

Initiative
Power of Change
Subculture clashes

Bureaucracy
SubCulture

Group -
(Social Integration)

Group +

Culture Collideation

Individualism (A)

Independence
Risk Taking
Self-Interest

Egalitarianism (B)

Equality
Open Data
Creativity

e-Gov.
SubCulture

Grid -

Source: Modified from Jackson, 2011

Conclusion

This article is the initial work of a series of studies conducted on the role of culture in e-government. In this study, it is explained how culture in bureaucracy influences the implementation of ICT (e-Gov). In Douglas's terminology, hierarchical culture types are in the strong grid-strong group quadrant. On the contrary, group members who are not close to power will feel removed from their group (weak group). On the other hand, this group remains limited by strict rules (strong grid). Both conditions of social relations make members of organizations in this type classified as Fatalism. The characteristics of fatalism are where members of the organization feel powerless, passive/apathetic, and isolated. Fatalism can move to another quadrant (hierarchism, individualism) which therefore produce unexpected flows in organization culture typologies.

Cultural collideation that occurs between bureaucracy and ICT is one of the factors that hinder the implementation of e-Government. However, the tug-of-war between ICT and bureaucracy that causes cultural collideation in each of the G-G quadrants cannot be

interpreted absolutely as a character that belongs to the bureaucracy alone or is otherwise owned by ICT alone. The four G-G quadrants have two polar properties in e-government implementation. These characters may be supportive or vice versa on the adverse side that can hamper the implementation process. In the implementation phase of e-government, it can be seen in several activity processes, where the four types can be both supportive and inhibiting. Therefore we can conclude that culture has two different sides, which under certain conditions can be either support or an obstacle to the successful implementation of e-government.

This article is the initial work of a series of studies conducted on the role of culture in e-government. Future research will be including initial data of e-government implementation variation in the organization. Deeper analysis at each stage of e-gov implementation and how the four types of culture, will affect the successful implementation. So it can be concluding that culture could be one of the determining factors in e-Gov stages. However, research that focuses on e-government nowadays still needed to understand how different individuals and groups socially construct meaning and how these different meanings have an effect for the implementation and management of e-government initiatives

References

Adler, P. & Bory, B. (1996). Two types of bureaucracy: Coercive versus enabling. *Administrative Science Quarterly*, *41*(1), 61–89. doi: 10.2307/2393986.

Alpert, S. & Whetten, D.A. (1985). Organizational Identity. *Research in Organizational Behavior*, *7*, 263–502.

Altman, Y., & Baruch, Y. (1998). Cultural theory and organizations: Analytical method and cases. *Organization Studies*, *19*(5), 769-785.

Bayonaa, S., & Morales, V. (2017). E-government development models for municipalities. *Journal of Computational Methods in Sciences and Engineering*, *17,* S47-S59.

Cameron, K. S., & Quinn, R. E., (2006). Diagnosing and changing organizational culture: Based on the competing values framework. Hoboken, NJ: Wiley.

Choudrie, J., Zamani, E. D., Umeoji, E., & Emmanuel, A. (2016). Implementing E-government in Lagos State: Understanding the impact of cultural perceptions and

working practices. *Government Information Quarterly*, *34*, 646-657. doi: 10.1016/j.giq.2017.11.004.

Danang, S. W. R. (2011). Pengembangan e-culture dalam pemerintahan: studi tentang peran pemimpin, sumber daya aparatur, lingkungan birokrasi dan stakeholders di Pemerintahan Kota Yogyakarta (Unpublished doctoral thesis), Universitas Gadjah Mada, Indonesia.

Dasgupta, S., & Gupta, B. (2005). Role of organizational culture in internet technology adoption: An empirical study. In *AMCIS 2005 Proceedings* (p. 39). Retrieved from http://aisel.aisnet.org/amcis2005/39.

Davenport, T. (1994). *Saving IT's soul: Human-centered information management. Harv. Bus.* Retrieved from http://wiki.sugarlabs.org/images/6/6b/Davenport_Saving.pdf.

Denison, D.R. (1996). What is the difference between organizational culture and organizational climate? A native's point of view on a decade of paradigm wars. *The Academy of Management Review*, *21*(3), 619-654. doi: 10.2307/258997.

Denison, D., & Mishra, A. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science, 6*(2), 204-223. doi: 10.1287/orsc.6.2.204

Dewar, R., & Dutton, J. (1986). The adoption of radical and incremental innovations: An empirical analysis. *Management Science, 32*, 1422-1433. doi: 10.1287/mnsc.32.11.1422.

Douglas, M. (2004). *Traditional culture – let's hear no more about it*. Retrieved from http://documents.worldbank.org/curated/en/243991468762305188/pdf/29816001804714 1re0and0Public0Action.pdf.

Douglas, M. (1999). Four cultures: The evolution of a parsimonious model. *GeoJournal, 47*(3), 411–415. doi: 10.1023/A:1007008025151.

Douglas, M., & Wildavsky, A. (1983). *Risk and culture: An essay on the selection of technological and environmental dangers*. London: University of California Press.

Douglas, M. (1978). *Cultural bias*. London: Royal Anthropological Institute.

Douglas, M. (1970). *Natural symbols: Explorations in cosmology*. New York, NY: Random House

Domínguez, L. R., Sánchez, I. M. G., & Álvarez, I. G. (2011). Determining factors of e-government development: A worldwide national approach. *International Public Management Journal, 14*(2), 218–248. doi:10.1080/10967494.2011.597152.

Ettlie, J. E., Bridges, W. P. & O'Keefe, R. D. (1984). Organization strategy and structural differences for radical vs. incremental innovation. *Management Science, 30,* 682-695. doi: 10.1287/mnsc.30.6.682.

Evans, A. J. (2007). Towards a corporate cultural theory. *Paper presented at the Workshop on Cultural Theory and Management, Held in Memory of Prof. Dame Mary Douglas*, UK: London: *ESCP-EAP Conference*. Retrieved from http://projects.chass.utoronto.ca/semiotics/cyber/douglas3.pdf.

Gasco, M. (2007). *Civil servants resistance toward e-government development*. London: Encyclopaedia of Digital Government, Idea Group Reference.

Goodsell, C. (2015). *The new case for bureaucracy*. Retrieved from https://www.researchgate.net/publication/329634769_The_New_Case_for_Bureaucray.

Hall. E. (1976). *Beyond culture*. Retrieved from https://monoskop.org/images/6/60/Hall_Edward_T_Beyond_Culture.pdf.

Helbig, N., Ramón Gil-García, J., & Ferro, E, (2009). Understanding the complexity of electronic government: Implications from the digital divide literature. *Government Information Quarterly, 26*(1), 89–97.

Hendry, J. (1999). Cultural theory and contemporary management organisation. *Human Relations, 52,* 557–577.

Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. Beverly Hills, CA: Sage.

Hood, C. (1996). Control over bureaucracy: cultural theory and institutional variety. *Journal of Public Policy, 15*(3), 207-230.

Hood, C. (1998). The art of the state, culture, rhetoric, and public management. Oxford: Clarendon Press.

Huang, J., Newell, S.M., Galliers, R., & Pan, S.L. (2003). *Dangerous liaisons? Component-based development and organizational subcultures*. In *Engineering Management, IEEE Transactions on 50* (pp. 89-99). doi:10.1109/TEM.2002.808297.

Ingrams, A., Manoharan, A, Schmidthuber, L., & Holzer, M, (2018). Stages and Determinants of E-Government Development: A Twelve-Year Longitudinal Study of Global Cities. *International Public Management Journal*, 1-39. doi: 10.1080/10967494.2018.1467987.

Iris Geva-May. (2002). Cultural theory: The neglected variable in the craft of policy analysis, *Journal of Comparative Policy Analysis: Research and Practice*, 4(3), 243-265, doi:

10.1080/13876980208412682.

Jackson, S. (2011). Organizational culture and information systems adoption: A three-perspective approach. *Information and Organization*, *21*(2), 57–83. doi: 10.1016/j.infoandorg.2011.03.003.

Jackson, S., Wong, M. & Philip, G. (2007). Cultural barriers/enablers in implementing e-government initiatives in Malaysia. *In Proceedings of the Americas Conference on Information Systems* (pp.1–12). Keystone, Colorado

Jackson, S., & Wong, M.S. (2016). A cultural theory analysis of e-government: Insights from a local government council in Malaysia. *Inf Syst Front*, *19*, 1391-1405. doi: 10.1007/s10796-016-9652-z.

Jensen, L. (1998), Cultural Theory and Democratizing Functional Domains, the Case of Danish Housing. *Public Administration*, 76: 117-139. doi:10.1111/1467-9299.00093.

La Porte, T. M., Demchak, C. C., & de Jong, M. (2002). Democracy and bureaucracy in the age of the Web: Empirical findings and theoretical speculations. *Administration and Society*, *34*(4), 411–446.

Layne, K., & Lee, J. (2001). Developing fully functional e-government: A four stage model. *Government Information Quarterly*, *18*(2), 122-136. doi:10.1016/S0740- 624X(01)00066-1.

Lee, G., & Kwak, Y. (2012). An Open government maturity model for social media-based public engagement. *Government Information Quarterly*, *29*,492–503. doi:10.1016/j.giq.2012.06.001.

Leidner, D. & Kayworth, T., (2006). Review: A review of culture in information systems research: Toward a theory of information technology culture conflict. *MIS Quarterly*, *30*, 357–399.

Maesschalck, K. W. J. (2014). Surveying organizational culture to explore grid-group cultural theory. *International Journal of Organizational Analysis*, *22*(2), 224-246. doi: 10.1108/IJOA-11-2011-0529.

Mahoney, T. (1979). Organizational Hierarchy and Position Worth. *The Academy of Management Journal, 22*(4), 726-737. doi: 10.2307/255811.

Malone, T. W., & Crowston, K. (1990). What is coordination theory and how can it help design cooperative work systems? In D. Tatar (Ed.), *Proceedings of the Third Conference on Computer-supported Cooperative Work (CSCW)* (pp. 357–370). Retrieved from

https://doi.org/10.1145/99332.99367.

Mamadouh, V. (1999). Grid-group cultural theory: an introduction. *GeoJournal*, *47*(3), 395-409. doi: 10.1023/A:1007024008646.

Manoharan, A. (2013). A study of the determinants of county e-government in the United States. *American Review of Public Administration*, *43*(2), 159-178. doi: 10.1177/0275074012437876.

Mars, G. (1982). *Cheats at work: An anthropology of workplace crime*. Aldershot: Ashgate.

Melitski, J., Holzer, M., Kim, S.-T., Kim, C.-G., & Rho, SY. (2005). Digital government worldwide: an e-government assessment of municipal web-sites. *International Journal of E-Government Research*, *1*(1), 01-19. doi:10.4018/jegr.2005010101.

Moon, M. J., & Norris, D. F. (2005). Does managerial orientation matter? The adoption of reinventing government and e-government at the municipal level. *Information System Journal*, 15, 43-60. doi: 10.1111/j.1365-2575.2005.00185.

Nurdin, N., Stockdale, R., & Scheepers, H. (2010). Examining the role of the culture of local government on adoption and use of e-government services. *IFIP Advances in Information and Communication Technology*, 79–93. doi:10.1007/978-3-642-15346-4_7.

Ouchi, W. G. (1981). *Theory Z how American business can meet the Japanese challenge*. Reading, MA: Addison-Wesley.

Patel, J. M. A & Rajendran, K. (2005). E-culture Inventory. *SCOPE-Annamalai Psychology Journal*, *1*, 1-11.

Heeks, R. (2002). Information systems and developing countries: Failure, success, and local improvisations. *The Information Society*, *18*(2), 101-112. doi: 10.1080/01972240290075039.

Ruppel, C. & Harrington, S. (2001). Sharing knowledge through intranets: A study of organizational culture and intranet implementation. *Professional Communication, IEEE Transactions*, *44*, 37-52. doi: 10.1109/47.911131.

Rahman, S., N. Rashid, A. Yadlapalli, & L. Yiqun, (2014). Determining factors of e-government implementation: A multi-criteria decision-making approach. *Proc. 18th Pacific Asia Conf. Inf. Syst. (PACIS 2014)*, 1-16.

Sawy, O. E., Eriksson, I., Raven, A., & Carlsson, S. (2001). Understanding shared knowledge creation spaces around business processes: Precursors to process innovation implementation. *Int. J. Technol. Manage, 22*, 149–173.

Schein, E.H. (2010). *Organizational Culture and Leadership. Jossey-Bass*. Retrieved from http://my.safaribooksonline.com/book/leadership/9780470190609.

Shuttleworth, M. (2009). *What is a literature review? What is a NOT a Literature Review? Conducting a Literature Review*. Retrieved from https://explorable.com/what-is-a-literature-review Links.

Siau, K. and Long, Y. (2005). Synthesizing e-government stage models – a meta-synthesis based on meta-ethnography approach. *Industrial Management & Data Systems*, *105*(4), 443-458. doi: 10.1108/02635570510592352.

Simmons, R. (2016). Improvement and public service relationship: Cultural theory and institutional work. *Public Administration*, *94*(4), 933–952. doi: 10.1111/padm.12257.

Sloan, R. & Green, H. (1995). Manufacturing decision support architecture. *Inform. Syst. Manage*, *12*, 7–16. doi: 10.1080/07399019508962950.

Smullen, A.J. (2007). *Translating Agency Reform*: *Rhetoric and Culture in Comparative 245 Perspective, Erasmus Universiteit Rotterdam, Rotterdam*. Retrieved from https://pdfs.semanticscholar.org/c445/6d80626801ffabb703ac675d5e6efff4bdee.pdf.

Thompson, M., Ellis, R., & Wildavsky, A. (1990). *Cultural theory*: *Political cultures series*. Oxford: Westview Press.

Turnip, K. (2009). Studi Perilaku tentang Resistensi terhadap Perubahan dan Peranan TIK/E-GOV pada Birokrasi Pemerintahan. In Kumorotomo, W & Pramusinto, A (Eds.). *Governance reform di Indonesia: Mencari arah kelembagaan politik yang demokratis dan birokrasi yang profesional*. Yogyakarta: Gava Media.

Van Maanen, J., & Barley, S.R. (1982). *Occupational communities: Culture and control in organizations*. Retrieved from https://apps.dtic.mil/dtic/tr/fulltext/u2/a122826.pdf.

Wachira, D.W. (2012). Overlooking organizational culture: Problems in analyzing the success and failures of e-government in developing countries. In K. J. Bwalya & S.Zulu (Eds.). *Handbook of Research on E-Government in Emerging Economies: Adoption, E-Participation, and Legal Frameworks* (pp. 440-454). US : IGI Global.

Wallach, E.J. (1983). Individuals and Organizations: The Cultural Match. *Training & Development Journal*, *37*(2).

Weber, Y., & Pliskin, N. (1996). The effect of Information System Integration and Organizational Culture on a Firm's Effectiveness. *Information & Management*, *30*, 81.

Wouters, K. & Maesschalck, J. (2014). Surveying organizational culture to explore grid-group cultural theory. *International Journal of Organizational Analysis, 22*(2), 224 – 246. doi: 10.1108/IJOA-11-2011-0529.

Wong, M. S., Jackson, S., & Philip, G. (2009). Cultural issues in developing E-government in Malaysia. *Behaviour & Information Technology*, *29*(4), 423–432.

Yunita, N.P, & Aprianto, R.D. (2018). Kondisi terkini perkembangan pelaksanaan e-government di indonesia: Analisis website. In *Seminar Nasional Teknologi Informasi dan Komunikasi 2018.* Yogyakarta: SENTIKA.

UN E-Government Survey 2018. (n.d.). Retrieved from https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2018.