

The Conceptual Perspective of the Moderating Role of Organizational Culture in the Information Technology Innovativeness and Adoption Decision

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Abstract
Government Information Technology Innovativeness defined as notion of openness to new information technology ideas in the government as an aspect of an organizational culture. In adopting the information technology innovativeness, organizational culture plays a crucial role. Misunderstood organizational culture within information technology innovativeness may generate unrealistic or inaccurate outcomes. Unfortunately, the role of organizational culture is nearly ignored in information technology innovativeness literature. In response, using the Resources based view (RBV), contingency and Diffusion-Innovation-Theory (DIT), this paper argues on the interaction between the influence of organizational characteristics (management support, information technology readiness, government strategy) and organizational culture, so as to explain information technology innovativeness. This proposition could improve understanding the information technology innovativeness and help to resolve inconsistency of findings in the literature.
Keywords: organizational characteristics; information technology innovativeness; Palestine; organizational culture

Introduction
Today innovation are going to extend the researching process and are being considered as one of the basics in the institutions and organizations. According to Cooper and Zmud (1990) and Davenport (2013) they described in there researches the institutions giving a lot of attention to the innovation implementation process in order to develop their work. Davenport (2013) described the innovation as the best way for the institutions success process.
Innovation is resulting from the Latin term Novus, meaning newfangled. defined ‘‘introduction of something new’’ or afresh idea, technique or stratagem (Tornatzky, Fleischer, & Chakrabarti, 2000). In this research, innovation states to information technology innovation as different to any other formula of innovation. Amongst the diversity of definition, government information technology innovativeness is reflected as a process, which is knowledge, technology and system established in the governmental working process. This process affected by the management support, Information technology readiness and government strategy with moderating role of organizational culture. In the epoch of globalization, deregulation, amassed competition, new e-commerce and technologies, public institutions are verdict it tougher to governmental working process and serve public, with this energetic and changing situation in the field of information technology, to attain development and sustain performance is to invent and innovate (Higgins, 1996).
Van der Boor, Oliveira, and Veloso (2014) see that the most advanced countries have realized the problem of innovation in the field of information technology and they able to deal with it in the light of how to deal with innovation and its implementations and adoption, but at the level of middle east countries, they still need to understand how to deal with this problem especially it deals with this problem and seek to resolve it just through training and development. Thereby to achieve satisfactory levels of performance level, but ignoring important opportunities for the need for a little effort and few cost it can achieve excellence and creativity among employees at a high level of performance in the field of information technology (Alatar, 2012). So, in order to stay on the top and keep a public reasonability advantage, government need to have a good strategy to maintain, progress, establish, allocation, and utilize the governmental organization’s resources and to achieve satisfied governmental working process and publicity, a systematic recognizing of the information technology innovativeness required which has a strong influence on both the government’s working and publicity process (Grant, 2006).
In addition, the alterations include the generation, adaptation of development ideas, governmental institution’s approaching, the Support of management, Information technology implementation and adoption in the governmental institutions, staffs and employees Inspiration in the side of information technology and related progress determinations in technology evolution process (Russell, Borick, & Shafritz, 2012). So, the information technology innovation and the suitable implementation of new technologies are an important part of governmental development procedure of all countries especially medial east countries (Said & Badawi, 2014).

The literature evidence discloses that fruitful innovation in the information technology in each country are those, which entrenched in their own indigenization struggles (Russell et al., 2012). In this study, government's information technology innovativeness considered a combined and active process.

This paper aims to investigate the level of government's information technology innovativeness in the local government in Gaza strip-Palestine. Through decision makers and managers, by investigate the relationship between management support and Government Information Technology Innovativeness. And, the Governmental IT readiness by studying the Information technology readiness effect on the Government Information Technology Innovativeness, and the Government Strategy by investigate the relationship between the government strategy and the Government Information Technology Innovativeness, also this study will investigate the moderating of the Organizational Culture on the Government Information Technology Innovativeness.

Review of Prior Studies on information technology innovativeness

In the information technology innovativeness and adoption researches, Efficiency-Choice (Rational Perspective) had been considered to examine as well as to study the influencing aspects, this perspective concerned with to study intra organizational factors that may affect the innovativeness and adoption decision (Khalifa & Davison, 2006; Shih, 2012)

Efficiency-Choice (Rational Perspective)

Efficiency-choice (rational perspective) emphases on organizational factors (Alsaad, Mohamad, & Ismail, 2015; Barrett, Heracleous, & Walsham, 2013; Basaglia, Caporarello, Magni, & Pennarola, 2009; Khalifa & Davison, 2006; Tan & Fichman, 2002). Supporters of this perspective say that the adoption of a new innovation is independent and a rational decision of any external influence in the social scope (Lyytinen & Damsgaard, 2011; Tan & Fichman, 2002). They forecast that innovation is adopted by rational decision makers who weigh costs and benefits of available alternatives and select accordingly (Ansari, Fiss, & Zajac, 2010; Hillebrand, Nijholt, & Nijssen, 2011). They highlight that the level of appropriateness of information technology innovation encourages possible adopters to taking or rejection it. They stress that suitability of innovation is, in turn, strongminded by evaluation of attractiveness of innovation and organizational capability (Alsaad et al., 2015; Basaglia et al., 2009; Khalifa & Davison, 2006; Tan & Fichman, 2002).

With respect to innovation attractiveness, possible adopters evaluate first the innovation characteristics to build thought that whether or not information technology innovativeness is a suitable excellent. Then, they decide whether to accept or to reject the innovation (Alsaad et al., 2015; Khalifa & Davison, 2006; Lyytinen & Damsgaard, 2011; Moore & Benbasat, 1991; Tan & Fichman, 2002). Therefore, the higher the appropriateness of innovation, the higher the innovation will be adopted (Ansari et al., 2010; Hillebrand et al., 2011; Lyytinen & Damsgaard, 2011; Rogers, 2003). A number of theories have been usually related to innovation characteristics evaluation such as Technology-Task- Fit (TJF), Technology Acceptance Model (TAM), Reasoned Action Theory (TRA), Theory of Planned Behavior (TPB), Recourse based view (RBV) and DOl (Lyytinen & Damsgaard, 2011).

DOl stands out as one of the most popular theories used in adoption research to examine the appropriateness of innovation (Hameed, Counsell, & Swift, 2012; Mohamad & Ismail, 2009; Sila, 2010). Meanwhile, Cao, Gan, and Thompson (2013) and Setia, Sambamurthy, and Closs (2008) relied upon TTF theory to examine innovation adoption determinant at the organization level The TTF theory assumes that technology will be used only if there is technological fit between the requirement of the task and functions of innovation (Goodhue & Thompson, 1995). System reliability, Data quality, Ease of use, Compatibility, and Authorization are the major dimensions of this theory (Goodhue, 1998). In the context information technology innovativeness, Cao et al. (2013) and Setia et al. (2008) found empirical provision for the effect of these factors on innovation adoption decision.

In addition, researchers tested the effect of factors such as managers' attitudes, perceptions, and beliefs on adoption decision. For instance, theories such as RBV, contingency, TRA, TAM, TBP or UTAUT have been used to investigate the information technology innovativeness and adoption (Chan, Chong, & Zhou, 2012; Gamal Aboelmaged, 2010; Grandón, Nasco, & Mykytyn, 2011; Nasco, Toledo, & Mykytyn, 2008; Oh, Cruickshank, & Anderson, 2009; Quaddus & Achjari, 2005; Yu & Tao, 2009). The chief explanation of using these theories at an organization level is that an organization's decision to adopt an innovation is driven by its individual beliefs about the focal technology innovation (Hossain & Quaddus, 2011). For example, Grandón et al. (2011) and Nasco et al. (2008) used TRA and TPB to examine the technology innovation determinants of e-commerce. These theories title that potential adopters behave rationally. They collect and evaluate information about an innovation, reflect the consequences of accepting an innovation, and finally decide whether to adept or reject (Hossain & Quaddus, 2011). Furthermore, Oh et al. (2009) and Teo, Lin, and Lai (2009) used the TAM model and round that perceived usefulness and perceived ease of use significantly influence the decision to adoption.

Moreover, Transaction Cost Theory (TCT) has been considered by Iskandar, Kurokawa, and LeBlanc (2001), Son and Benbasat (2007) and Son, Narasimhan, and Riggins (2005) to conclude the situations under which

organizations should benefit from a specific type of IT innovation, The main idea of TCT is that both internal coordination and external interaction increase the transaction costs. Coordination machineries or governance construction should be used to decrease costs.

In this stream of research, scholars focused on the operation characteristics and relationship characteristics between partners. For example, Grover and Saeed (2007)inspected the effect of demand uncertainty, component complexity, market volatility, and market fragmentation. These factors coupled with an open information-sharing environment are hypothesized to influence lOS usage. The result showed that firms tend to use lOS under three conditions including (i) high transaction complexity, (ii) presence of open information sharing environment, and (iii) low market fragmentation. Furthermore, Son and Benbasat (2007) report that product characteristics, demand uncertainty, and market volatility exhibit a significant influence on adoption intent and/or usage intensity. An equally significant aspect of determining the appropriateness of innovation is organization capability and characteristics. It focuses on set of internal organizational characteristics that enables the organization to adapt an innovation in successful manner (Ghobakhloo, Hong, Sabouri, & Zulkifli, 2012; Khalifa & Davison, 2006; Lin, 2013). Ramdani and Kawalek (2007) stated that the rationale behind the influence of organization capability corresponds to the Resource Based View (RBV) theory. It assumes that the organization will exploit its core competencies to gain competitive advantage.

These factors (characteristics) are more discretionary and controllable by the organization and its top management (Damanpour & Schneider, 2006; Ghobakhloo et al., 2012). Scholars investigated the effects of a wide range of organizational factors. Some of them examined the influence of factors related to the organization's ability to adopt innovation successfully. The organization's ability variables such as IT sophistication, technology readiness, technology competence, IT Intensity, information technology infrastructure, and back-end capabilities have been extensively examined (Chan, Chong, et al., 2012; Chwelos, Benbasat, & Dexter, 2001; Ifinedo, 2011; Khalifa & Davison, 2006; Teo et al., 2009; Zhu & Kraemer, 2005; Zhu, Kraemer, & Xu, 2006). In addition, information technology readiness which involves variables such as organization slack, feasibility, and financial commitment (Khalifa & Davison, 2006;Tsai, Lai, & Hsu, 2013Zheng, Chen, Huang, & Zhang, 2013), have been also examined. All of these variables highly participate in predicting the adoption behavior.

Other scholars examined variables related to organizational structure such as firm size (Al-Hakim, Abdullah, & Ng, 2012; Oliveira & Martins, 2010; Teo, Ranganathan, & Dhaliwal, 2006; Zhu & Kraemer, 2005; Zhu et al., 2006), firm scope (Chan, Chong, et al., 2012; Intan Salwani, Marthandan, Daud Norzaidi, & Choy Chong, 2009; Soares-Aguiar & Palma-dos-Reis, 2008; Yoon & George, 2013; Zhu, Kraemer, & Xu, 2003; Zhu et al., 2006), centralization (Hameed et al., 2012; Ranganathan, Dhaliwal, & Teo, 2004; Unsworth, Sawang, Murray, Norman, & Sorbello, 2012)and formalization (Claycomb, Iyer, & Germain, 2005; Hameed et al., 2012).

Lastly, some researchers follow leadership research. The main idea of this stream is that top managers and organization strategies heavily affect the organizational capabilities to adopt technology. They are forces that work with or against innovation adoption. These forces manifested by enabling and motivating lower level managers and employees, establishing organizational culture, and building capability for change and adopting new innovation (Ahmad, Abu Bakar, Faziharudean, & Mohamad Zaki, 2015; Damanpour & Aravind, 2012; Damanpour & Schneider, 2006; Ghobakhloo et al., 2012; Hameed et al., 2012). Researchers in this field assume that managers have personal qualities predisposing to innovate (Slappendel, 1996). Thus, factors such as CEO attributes relating to age, education, tenure (Al-Qirim, 2008; Damanpour & Schneider, 2006; Lip-Sam & Hock-Eam, 2011; Peltier, Zhao, & Schibrowsky, 2012; Shah Alam, 2009), CEO's innovativeness, CEO involvement and support (Al-Qirim, 2007; Liang, Saraf, Hu, & Xue, 2007; Lin, 2014; Paul Jones, Dr Martin Beckinsale, Ramdani, Chevers, & A. Williams, 2013) (Thong, 1999; Thong & Yap, 1995; Zheng et al., 2013), managerial IT Knowledge (Ranganathan et al., 2004; Teo et al., 2006; Zhang & Dhaliwal, 2009), managerial obstacles (Thatcher, Foster, & Zhu, 2006), managerial productivity (Kuckertz & Breugst, 2009)and managerial belief and attitude (Ahmad et al., 2015; Chan, Chnog, & Darmawan, 2012; Gamal Aboelmaged, 2010; Grandón et al., 2011; Nasco et al., 2008; Oh et al., 2009; Quaddus & Achjari, 2005; Yu & Tao, 2009) have been examined.

In conclusion, this perspective assumes that adoption is a rational behavior and the potential adopter enjoys complete freedom in deciding whether to adopt or reject the innovation. The potential adopter builds his decision based on cognitive state about innovation desirability and its capability to adopt such technology. The influence of external environment is almost ignored in this perspective. Next, section discuses in details the role of external environment on decision to adopt.

The role of organizational culture in information technology innovativeness and Adoption

Several studies have considered the organizational cultural factor (Goodman & Darr, 1998; Lee & Choi, 2003; Venkatesh & Bala, 2012). These studies have shown that organizational culture is an important factor as an influence in the adoption and use of technology. Jarvenpaa and Ives (1991), in their exploratory study with interviews of 25 senior managers of multinational organizations, noted that culture has an impact on the business of multinational organizations. They also stated that organizations sensitive to the organizational culture to be

more successful.

There is a growing agreement that organizational culture affects technology innovativeness implementation decision making (Ke, Liu, Wei, Gu, & Chen, 2006). Straub (1994) conducted a longitudinal study to answer the question of how societal beliefs and values of the affect the use and acceptance of information technology innovativeness. It was suggested that organizations should attempt to work with, rather than against, organizational cultural patterns. Moreover, Almoawi (2011) in his study, suggested that organizational culture is an important variable in the development process and it may introduce its own set of problems, the consequences of which may range from project failure to delayed delivery of working systems.

Shore and Venkatachalam (1996), in their empirical study, stated that institutions culture is one of the most important variables that affects the organizations information technology. (Ke et al., 2006) the research indicate significant impact of the institutional factors on organization's technology adoption, and the moderating effect of organizational culture. In addition, Douglas and Craig (1997) examined the critical issues responsible for changing the behaviour the new technology implementation. The main findings of their theoretical study provided an important insight into the changing dynamics of behaviour on the new implementation for the technology. Organizational Culture was the most important factor found.

Hassan and Nhemachena (2008) in their qualitative study about new information technology adoption that was conducted in the Middle East, West Africa, and Australia. The authors concluded that resistance to change and the fear that information communication technology will upset the social order are highly significant factors that inhibit the adoption of information communication technology. Guerra, Martínez, Munduate, and Medina (2005) they conducted a study using the organizational culture as moderator in the organizational consequences. The result of the study indicated that organizational culture moderates the effect of task changes in the public organizations. These differences are based on the organizational cultural differences presented by contingency theory which is the theory used to support the moderating role of the organizational culture in Guerra et al. (2005) study.

Simon (2000) reported that organizational cultural influence information communication technology due to the gender different role in information communication technology innovativeness and its perception. They measured differences in computer anxiety, which was found correlated strongly with cultural. Moreover, Harris and Davison (1999) studied the examination of computer anxiety and involvement with information communication technology using six groups of computer-using undergraduate and graduate students in China, Hong Kong, Malaysia, New Zealand, Tanzania, and Thailand. Cultural differences were found to exist between the information communication technology involvements of some of the groups.

Carayannis and Sagi (2001) conducted an exploratory study to measure how the culture of the development team affects the completion of an information technology project. Results indicated that cultural differences affect the success of the system's development process. The differences in the culture of international development teams can have both positive and negative impacts on the timely completion of information technology projects. Okazaki (2005) examined 150 multinational e-commerce Web sites based on information content, cultural values, and creative strategies. The results showed that the cultural differences effect on the technology use. Srite and Karahanna (2006) studied the levels of organizational culture and individual behaviour of workers in organizations. They indicated that organizational cultures have a main effect on organizations and that behaviour with a power task are affected by organizational.

Methodology

This study focuses on examining the determinant of the information technology innovativeness and adoption in the local government in Gaza strip - Palestine. Low rate of information technology in the Gaza strip local government is dedicated (Sultan, 2011). . This study, therefore, considers 922 managers in the ministers of the Gaza strip-Palestine local government directory as a sampling frame to study this issue. Since the research objective is to examine the determinants of determinant of the information technology innovativeness and adoption in the local government in Gaza strip - Palestine, the unit of analysis is the organization. The targeted respondent all manager at the Palestinian ministries in the Gaza strip with grades General Director (A3), General Director (A4), Deputy Director (A), Unit managers (B) and Unit manager (C) they were (922). They generally have extensive IT knowledge and the about the governmental working process and processes and they have the ability to complete the questionnaire. An online internet questionnaire is considered for the data collection. There are three sections in the survey questionnaire. The first section is designed to collect demographic information relating to the respondents such as their: age, gender, Qualification, Job Title, Years of Experience, and working Ministry. The second section collects data about the government's information technology innovativeness. The last section collects data about factors affecting government's information technology innovativeness. In this section, the questions have been built to proceed logically with one question linking to the next. Questions were three categorized divided to the independent variables and the moderator variable.

Conclusion

This paper discusses the importance of organizational culture in information technology innovativeness and adoption decision and explains the usage of different influence strategy may affect the role of other factors in information technology innovativeness and adoption decision. This concept paper suggests and encourages future work to examine the role of organizational culture to explain information technology innovativeness and adoption decision. In the next stage of this study, authors intend to investigate whether an influence strategy plays a significant role in moderating the effect of information technology innovativeness determinants to explain information technology innovativeness and adoption decision. By doing so, managers and policy makers can utilize the findings of this study to understand which factors would most likely facilitate the information technology innovativeness and adoption. In addition, the findings of this paper are to enable the managers and policy makers to manage the effects of these factors more effectively.

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