

## **e-Government Practices: The Roadmap Towards Public Trust Through Good Governance**

Hassan Alaaraj and Sallahuddin Hassan  
School of Economics, Finance and Banking, College of Business,  
University Utara Malaysia, Kedah, Darul Aman, Malaysia

**Abstract:** Public institutions in developing countries are currently facing a severe decline in the level of citizen's trust which has become an important concern of many economists and researchers all over the world. Without trust, citizens will not be able to participate and contribute in the government strategies because it is fundamental for societies to grow and for governments to act well. Good governance principles are considered as key objectives for creating trust in government. These principles can be achieved through practicing some tools such as e-Government which is measured by its ability to have an effective environment thus providing the quality services to the citizens. The main purpose of this study is to develop the mediating effect of good governance on the relation between e-Government and public trust in the developing countries. Conceptually, a research framework is developed based on recent literature review. The main research findings signify the importance of practicing e-Government and its ability in promoting trustworthy behaviors through the dimensions of good governance mainly efficiency, effectiveness, transparency and innovativeness. As for future studies, it is recommended to highlight more on economic reforms in developing countries and extend the research empirically.

**Key words:** e-Government, public trust, good governance, public sector, load map

---

### **INTRODUCTION**

The main concern of many economists and researchers all over the world is to act in response to the delay in development that is caused by many factors such as the weak financial planning, shortage of technology, inappropriate achieving progress, weakness in investments, lack of good governance (Good governance is the transformative view of the governance that controls corruption and improves services delivery. This view is the processes by which organization are directed, controlled and held to account in order to match the needs of the community through the efficient use of the resources) and lack of trust (trust is defined as a leaning to believe positively by the other party's action with expectation in a responsible way. It facilitates cooperative performance and leads people to engage in the transactions of government) in government. Smith (2010) claimed that most recent surveys showed unacceptable decline in level of trust in institutions of democratic governance in which this form of trust as well as the good governance, play a key role regarding the social and economic progress (Ahrens, 2006).

Therefore, recent studies stated that without trust, citizens will not be able to participate and contribute in the

government strategy (Park and Blenkinsopp, 2011; Colesca, 2015). Thus, public organizations have to give a high priority for the challenge of gaining citizen's trust since their satisfaction is not fully obtained if they do not trust the process of producing public services and governance as well (Park and Blenkinsopp, 2011).

The importance of trust is demonstrated in a large number of comparative studies in the field of economic sociology. Several studies generalized trust as a potent catalyst for economic growth, efficiency, development, innovation, success at the organization and country level and conventional growth factors (Das *et al.*, 2009; Warkentin *et al.*, 2002; Volken, 2009; Davis *et al.*, 2000). Such studies claimed that trust considerably reduces transaction and enforcement costs due to the cooperative networks and efficient flow of information which tend to control risk and uncertainty, monitor job satisfaction and enhance motivation. Therefore, it makes more resources available for the productive use. Zumbo (2008) illustrated how measuring the high levels of social capital by the social trust is related to economic performance, effective political institutions, low rates of crime and other social ills.

It is important to build the trust in government and advance the relationship involving the government and

the citizens through the accountability, participation and interaction (Ndou, 2004). Yet, it is noted by Grimmelikhuijsen (2012) that trust in government has remarkably decelerated in the foremost developing countries. This is not acceptable because the high level of trust in government is considered crucial for societies to grow and for governments to act well.

The literature indicates that trust in government is influenced by numerous factors mainly efficiency and effectiveness; benevolence and responsibility; integrity and accountability, participation and transparency. These factors and others are considered as key objectives for creating trust in government through the adaptation of fair and open processes which in turn results in efficient and effective outcomes.

Moreover, Alemayehu stated that service quality in governments can be enhanced through the use of ICT such as government emails and portals. Such facilities have the potential of shifting traditional governments into electronic governments or so called e-Government. This innovation aims to facilitate the access to data and services without any particular need for knowledge or expertise regarding the users. According to Berthon *et al.* (2008) the readiness of e-Government (e-Government is defined as a tool that combines the ICT to attain better government performance, in addition to the improvement of its quality of services regarding businesses and citizens. These services facilitate access to information and accountability that make the economy more efficient and transparent). is measured by its ability to have an effective e-Business environment, thus providing services that are related to business sector and attractive to investment.

Measuring the efficient outcomes of e-Government and evaluating the customer behaviour can be applied using service uptake as an alternative measure. It is noticed that the utilization of e-Government services is steadily growing worldwide and the growth determinants are encouraging especially that people consider internet as an adequate means of interacting with both government and business sectors. Also, individuals who access the websites of government departments are considered not only as critical consumers but also as demanding citizens who look for information and services. Thus, developing countries need to put their own manners toward economic modernization and transformation that grant more efficient administration, advance transparency, enhance the business environment in general and then build the trust among the citizen.

## MATERIALS AND METHODS

**Theoretical review:** As mentioned earlier, e-Government practices and good governance principles have been proposed as significant approaches to boost the public trust in governments. Meanwhile, public trust is still a result of ethical governance since accountability, transparency; integrity and efficiency are considered as ethical mechanisms that can reduce corruption and accomplish citizen's expectations thus positively affecting the public trust (Osifo, 2012).

Trust in public administration is mainly related to participation, performance and collaboration as it is considered as an effective way of achieving trust. The ability to control and utilize significantly the potentials of each member in a decent manner can positively affects the public trust. This performance can be achieved through applying e-Government tool as suggested by several researchers that citizen trust and satisfaction are influenced by e-Government (Jalali and Khorasani, 2012; Tolbert and Mossberger, 2006; West, 2004). Zhai (2011), Rana (2011) and Cellary (2008) declared that e-Government can improve convenient communication between citizens and government and enables more direct involvement in government decision-making.

Conceptually, the methodology of mediation tends to "identify the intermediary process that leads from the independent variable to the dependent variable". Hence, good governance is proposed to mediate the implementation of e-Government and enhance its effect on public trust. However to provide a useful model for studying this mediation, diverse theoretical perspectives were used as a background for this study. Particularly, these perspectives are the Diffusion of Innovation theory (DOI) and institutional trust and trustworthiness theory.

Based on the DOI theory, diffusion takes place when organizations, individuals and groups accept innovative facts such as technologies and use it (Lippert and Forman, 2005). DOI theory illustrates two factors of innovation diffusion the perception of the technology's characteristics and the user's awareness of the system. However the speed of diffusion is influenced by an innovation's complexity, relative benefit, trial ability and compatibility. In addition, the visibility, results from demonstrability and voluntariness of using the innovation can also affect the rate of diffusion (Zubi, 2012; Carter and Belanger, 2005). Since, innovation is mostly defined as an initiative that is perceived to be novel the concept of e-Government with its originality is considered as an innovation (Rogers, 2003) where previous studies investigated its implementation based on the DOI theory

(Sang *et al.*, 2009; Lean *et al.*, 2009). Thus, DOI is a trendy theory used in ICT research to clarify user acceptance of new technologies (Carter and Belanger, 2005).

Moreover, several studies adopted the theory of institutional trust and trustworthiness while studying the e-Government practices (Smith, 2011; Das *et al.*, 2009; McKnight *et al.*, 2002). They illustrated how trust can be transmitted through means of communication that are provided by e-Government practices. Generally, academic literature including information systems, political science and sociology highlight more on the concept of institutional trust rather than institutional trust worthiness. Institutional trust can be explained as a definite type of trust between individuals and social institutions. Basically, institutional trust is mainly identified as trust in the rules, tasks and norms of institutions regardless which people are enacting these rules.

As being one of the most commonly referenced conceptions in the information systems literature, institutional trust is discussed at the level of institutional norms and the effectiveness of accountability mechanisms (Zucker, 1986). To adopt it properly, three conditions are required, both the truster and trustee know the institutional norms and the trustee is expected to follow it, the truster can effectively monitor the trustee and the institution has effective accountability mechanisms in case the trustee diverges from the norms. In addition, trust in institutions is highly affected by the flexibility of codes and rules and the credible threat of sanctions (O'Hara, 2004).

This study has implications for thinking about the role of e-Government implementations in building trustworthy institutions and ultimately to enhance public trust toward these institutions. Such an approach raises a new set of concerns beyond concepts of efficiency, effectiveness and transparency. For instance, it is fundamental to study how ICTs and associated reform programmes such as e-Government are diffusing and impacting the institutional trustworthiness (Smith, 2011). Moreover it was proven that using ICT to automate processes improves service delivery and encourages citizens to participate and trust the government respectively (Tolbert and Mossberger, 2006). Hence, integrating these two theories would explain the attitudes of citizens towards such kind of innovations.

## RESULTS AND DISCUSSION

**Empirical Review:** Lot of researchers have studied the relationship between technologies and its influence on good governance and trust (Gomez, 2012; Berthon *et al.*,

2008; Tolbert and Mossberger, 2006). Although, it is argued by several studies such as Grimmelikhuijsen (2012), Tolbert and Mossberger (2006) and Warkentin *et al.* (2002) that there is a shortage of empirical information about e-Government and its influences on the attitudes and trust. Therefore this study tends to highlight the relationships among e-Government, good governance and public trust as have been discussed in the previous literature.

**Relationship between e-Government and good governance:** There are several empirical studies that have been conducted to investigate the relationship between e-government and good governance. Navarro *et al.* (2012) argue that e-government has become one of the most important keywords for the public sector reform, where it guarantees transparency, accountability and better communication between local and national administrations and their public likewise. This is evidenced in their study which included 179 Spanish official town websites related to the municipalities. The findings provide numerous opportunities for their civic engagement. The main conclusion of this study shows a positive relation between e-Government and civic engagement even though ICT can influence the adoption of e-Government.

Furthermore, Gajendra *et al.* (2012) investigated several empirical studies related to e-Government and public participation principles. They found a positive relationship between e-Government and public participation while enhancing the quality services as well. Alternatively, Ochara (2010) explored through a qualitative analysis the relationship between e-Government conceptualization and its impact of policy makers. The study was underpinned by critical realist assumptions and found that the central government can extend its control over local authorities through e-Government and reduce the bureaucratization through managerialization.

Moreover, Rotchanakitumnuai (2013) examined the effect of e-Government procurement on the good governance through conducting a survey of 169 professionals in Thai government agencies. The researcher found that a transparent e-Procurement process has a positive effect on good governance practice and decrease collusion among vendors.

In a systematic review of the literature, Siddiquee (2008) analyzed secondary data from the public sector in Malaysia. He claimed a positive but limited relationship between e-Government and service delivery innovations and reforms. He also argued that e-Government can

improve services by cutting bureaucratic web, increasing transparency and reducing corruption in the public sector.

On other hand, e-Government may affect good governance in different manner. For instance, the Chinese progress towards e-Government and its influence on governance and service delivery was analyzed by Holliday and Yep (2005). Such progress was found to be shallow despite of the diverse e-Initiatives applied since the early 1990s and the changes that are currently occurring in the official positions towards public reforms. The researchers also stated that the impact of Chinese e-Government on good governance is limited because of several factors related to the effective development in the country.

**Relationship between e-Government and trust:** Most of literature has considered citizens as customers that are interacting with the government through its reforms and services (Navarrete, 2009; Kampen *et al.*, 2006; Bouckaert and Walle, 2003). Thus, governments should give a high priority for developing a trust-based relationship with the public as a mean to engage all citizens in its processes and service delivery.

Tolbert and Mossberger (2006) have empirically studied the relationship between e-Government and trust attitudes through surveying 815 user of government web sites. The findings showed a significant relationship between using government web sites and trust. Hence, e-Government can enhance process-based trust by strengthening and facilitating the interactions with citizens and increase their perceptions of responsiveness.

Similar results were obtained by Heeks using a qualitative approach. He explored the relationship among service delivery and trust in public organizations. Heeks found that e-Government has positive impacts on citizen's trust and confidence in government which in turn adds a public value to the country. Moreover and according to Jalali and Khorasani (2012), e-Government indexes and public trust are significantly correlated based on surveying 276 citizens of five districts in Tehran using Kolmogorov-Smirnov test (KS-test) for determining the normality of indexes and testing the presence or absence of proposed correlation.

**Relationship between good governance and trust:** The extensive review of literature reveals that trust is significantly interrelated to governance. Bouckaert and Walle (2003) for instance, emphasized on the importance of increasing the quality of governance which leads to more satisfied and trusting citizens. The findings of this

research show that participation accountability and transparency build trust because it identifies the public interests and makes actions more predictable.

In the same context, Osifo (2012) stated through a qualitative research that ethical governance is fundamental as it focuses on protecting the right thoughts and values needed for a successful anticorruption campaign. Also, the study found a strong linkage between trust in public administration and ethical governance performance where it can make the desired performance a fact that can be monitored by the anticorruption agencies.

In addition, the literature indicates numerous factors influencing the trust such as efficiency, effectiveness, accountability, integrity, responsibility, participation and transparency. Lee proved the positive relationship among participation, transparency and trust based on interviews with ICT specialists, policy-making community and public officials around eight post industrial countries. Similarly, Kim and Kim found a positive impact of both, participation and transparency on the level of trust in government in which all are coupled under reform measures. However, Grimmelikhuijsen (2012) argued in his experimental study the role of transparency whether it builds trust or provides citizens with more information to blame and criticize government continuously. The results show that transparency does not necessarily leads to trust. Moreover, it can even direct to minor levels of trust if people are disappointed with the degree of government transparency. Such an outcome highlights new challenges to the current studies concerning the impact of transparency on trust.

**Mediating effect of good governance on the relationship between e-Government and public trust:** However, the role of good governance as a mediator between e-Government and trust is limited where few suggested indirect effects of internet use on trust in government through perceptions of transparency, interactivity, efficiency and accountability (Chhabra and Jaiswal, 2008; Welch and Hinnant, 2003).

In addition, Park and Blenkinsopp (2011) suggested public good governance agencies to improve the public trust by implementing e-Government practices such as web sites, promoting the ICT-based public service delivery and making its process more transparent to enhance accountability as well. Therefore, this study proposes the research model that includes good governance as the mediator of the relationship between e-Government and public trust as shown in Fig. 1 where the conceptual framework is developed.

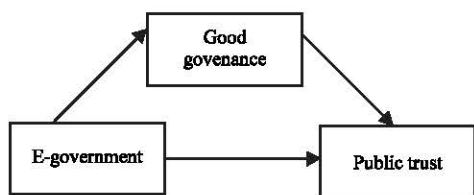


Fig. 1: Reseache theroetical framework

### CONCLUSION

This study provided a conceptual framework that can be used as a base for future research in the areas of e-Government good governance and public trust. It is obvious that practising e-Government promotes good governance particularly in developing an efficient, effective and transparent environment that the public sector can interact with. Thus, no reform will build trust unless this logic of governance is changed to ensure opportunities for innovation and corporation among citizens. One of the main limitations of this study is being discussed from conceptual perspective. Thus, it would be valuable for further studies to highlight other managerial attitudes for successful implementation of e-Government practice. Also, extending the research empirically would contribute to the literature, especially at the level of public sector in the developing countries.

### REFERENCES

Ahrens, J., 2006. Governance in the process of economic transformation. Draft Vers. Disponible, 12: 1-23.

Berthon, P., L. Pitt, D. Cyr and C. Campbell, 2008. E-readiness and trust: Macro and micro dualities for E-commerce in a global environment. *Int. Marketing Rev.*, 25: 700-714.

Bouckaert, G. and V.D.S. Walle, 2003. Comparing measures of citizen trust and user satisfaction as indicators of good governance: Difficulties in linking trust and satisfaction indicators. *Int. Rev. Admin. Sci.*, 69: 329-343.

Carter, L. and F. Belanger, 2005. The utilization of e-Government services: Citizen trust, innovation and acceptance factors. *Inform. Syst. J.*, 15: 5-25.

Cegarra, N.J.G., J.R.C. Pachon and J.L.M. Cegarra, 2012. e-Government and citizens engagement with local affairs through E-websites: The case of Spanish municipalities. *Int. J. Inf. Manage.*, 32: 469-478.

Cellary, W., 2008. Strategic impact of e-Government on economy and society. Proceedings of the 2nd International Conference on Theory and Practice of Electronic Governance, December 1-4, 2008, ACM, Cairo, Egypt, ISBN: 978-1-60558-386-0, pp: 149-153.

Chhabra, S. and M. Jaiswal, 2008. e-Government organizational performance framework: Case study of Haryana State in India. *IGI. Global Int. J. Electron. Government Res.*, 4: 57-80.

Colesca, S.E., 2015. Understanding trust in e-Government. *Eng. Econ.*, Vol. 63,

Das, J., C. DiRienzo and J.J. Burbridge, 2009. Global e-Government and the role of trust: A cross country analysis. *Int. J. Electron. Government Res.*, 5: 1-18.

Davis, J.H., F.D. Schoorman, R.C. Mayer and H.H. Tan, 2000. The trusted general manager and business unit performance: Empirical evidence of a competitive advantage. *Strategic Manage. J.*, 21: 563-576.

Gajendra, S., B. Xi and Q. Wang, 2012. e-Government: Public participation and ethical issues. *J. E-Governance*, 35: 195-204.

Gomez, B.F., 2012. Generality in nanotechnologies and its relationship to economic performance. Ph.D Thesis, University of New York, New York, USA.

Grimmelikhuijsen, S.G., 2012. Transparency and trust: An experimental study of online disclosure and trust in government. Ph.D Thesis, Utrecht University, Utrecht, Netherlands.

Holliday, I. and R. Yep, 2005. e-Government in China. *Public Admin. Dev.*, 25: 239-249.

Jalali, F. and F. Khorasani, 2012. The relationship between e-Government and the public trust among the citizens in district 5, Tehran. *Res. J. Appl. Sci. Eng. Technol.*, 4: 5261-5267.

Kampen, J.K., D.S.V. Walle and G. Bouckaert, 2006. Assessing the relation between satisfaction with public service delivery and trust in government: The impact of the predisposition of citizens toward government on evaluations of its performance. *Public Perform. Manage. Rev.*, 29: 387-404.

Lean, O.K., S. Zailani, T. Ramayah and Y. Fernando, 2009. Factors influencing intention to use e-Government services among citizens in Malaysia. *Int. J. Infor. Manag.*, 29: 458-475.

Lippert, S.K. and H. Forman, 2005. Utilization of information technology: Examining cognitive and experiential factors of post-adoption behavior. *IEEE. Trans. Eng. Manage.*, 52: 363-381.

McKnight, D., V. Choudhury and C. Kacmar, 2002. Developing and validating trust measures for e-commerce: An integrative typology. *Inform. Syst. Res.*, 13: 334-359.

Navarrete, A., 2009. Understanding trust and its consequences for e-Government transactional services: A cross-cultural perspective. Ph.D Theses, The Claremont Graduate University, Claremont, California.

- Ndou, V., 2004. e-Government for developing countries: Opportunities and challenges. *Electron. J. Inf. Syst. Dev. Countries*, 18: 1-24.
- O'Hara, K., 2004. *Trust: From Socrates to Spin*. Icon Books, Cambridge, England.
- Ochara, N.M., 2010. Assessing irreversibility of an e-Government project in Kenya: Implication for governance. *Government Inf. Q.*, 27: 89-97.
- Osifo, O., 2012. The Effects of Ethical Governance on Public Trust: A Comparative Analysis of Anti-Corruption Policies and Procedures in Nigeria, Ghana and Cameroon. University of Vaasa, Finland.
- Park, H. and J. Blenkinsopp, 2011. The roles of transparency and trust in the relationship between corruption and citizen satisfaction. *Int. Rev. Admin. Sci.*, 77: 254-274.
- Rana, T., 2011. Inclusion in e-Government: A security perspective. *Proceedings of the Workshop on e-Government*, September 13, 2005, Brunel University, Uxbridge, England, pp: 1-9.
- Rogers, E.M., 2003. *Diffusion of Innovations*. 5th Edn., Simon and Schuster, New York, USA., ISBN-13: 9780743258234, Pages: 576.
- Rotchanakitumnuai, S., 2013. The governance evidence of e-Government procurement. *Transf. Government People Proc. Policy*, 7: 309-321.
- Sang, S., J.D. Lee and J. Lee, 2009. e-Government adoption in ASEAN: The case of Cambodia. *Internet Res.*, 19: 517-534.
- Siddiquee, A.N., 2008. Service delivery innovations and governance: The Malaysian experience. *Transf. Government People Proc. Policy*, 2: 194-213.
- Smith, M.L., 2010. Building institutional trust through e-Government trustworthiness cues. *Inf. Technol. People*, 23: 222-246.
- Smith, M.L., 2011. Limitations to building institutional trustworthiness through e-Government: A comparative study of two E-services in Chile. *J. Inf. Technol.*, 26: 78-93.
- Tolbert, C.J. and K. Mossberger, 2006. The effects of e-Government on trust and confidence in government. *Public Admin. Rev.*, 66: 354-369.
- Volken, T., 2009. Elements of trust: The cultural dimension of Internet diffusion revisited. *Inf. Technol. Educ. Soc.*, 10: 45-77.
- Warkentin, M., D. Gefen, P.A. Pavlou and G.M. Rose, 2002. Encouraging citizen adoption of e-Government by building trust. *Electron. Markets*, 12: 157-162.
- Welch, E.W. and C.C. Hinnant, 2003. Internet use, transparency and interactivity effects on trust in government. *Proceedings of the 36th Annual Hawaii International Conference on System Sciences*, January 6-9, 2003, IEEE, Chicago, Illinois, pp: 7-7.
- West, D.M., 2004. e-Government and the transformation of service delivery and citizen attitudes. *Pub. Admin. Rev.*, 64: 15-27.
- Zhai, C., 2011. Study on environment factors affecting B2B E-marketplace adoption in China: From E-readiness perspective. *Proceedings of the 2011 International Conference on Computer Science and Service System (CSSS)*, June 27-29, 2011, IEEE, Beijing, China, ISBN: 978-1-4244-9762-1, pp: 4062-4065.
- Zubi, A.M.I.S., 2012. Electronic government adoption model among business organizations in Jordan. Ph.D Thesis, Universiti Utara Malaysia, Changlun, Malaysia.
- Zucker, L.G., 1986. Production of trust: Institutional sources of economic structure, 1840-1920. *Res. Org. Behav.*, 8: 53-111.
- Zumbo, A.D.W.B.D., 2008. Understanding and using mediators and moderators. *Soc. Indic. Res.*, 87: 367-392.