# Mastering Electronic Government in the Digital Age

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### INTRODUCTION

The ultimate goal of electronic government (e-government) is to offer the increased portfolio of public services to citizens in a cost-effective manner. Most governments make tremendous efforts to deliver the online services to citizens (Roy, Chartier, Crete, & Poulin, 2015). The operation of information and communications technology (ICT) has been the major development of e-government in the past decade (Reddick & Anthopoulos, 2014). ICT has altered public administration by transforming the internal processes and external interactions (Meijer & Bekkers, 2015). E-government services must be redesigned to ensure that the benefits of ICT systems are completely employed (Kasemsap, 2016). The most significant role of ICT is to drive the organizational innovation through information systems and solve the crucial problems that the government cannot solve on its own (Sindelar, Mintz, & Hughes, 2010).

E-government has emerged as an effective method of delivering government services to citizens (Weerakkody, Dwivedi, & Kurunananda, 2009). The diffusion of e-government is an international phenomenon (Carter & Weerakkody, 2008). As an integral part of administration modernization (Stier, 2015), e-government is one of the most important ways to bridge the digital platform in developing countries (Venkatesh, Sykes, & Venkatraman, 2014), acts as an effective exploration of government innovation (Wu & Guo, 2015), and can improve the government performance and create the new public value for citizens and businesses (Wang, 2014). The success of e-government system lies with its cost savings

in implementation, adoption, benefits provided to the recipients of the system, and associated risks in operating the system (Weerakkody, Irani, Lee, Osman, & Hindi, 2015).

This article aims to bridge the gap in the literature on the thorough literature consolidation of e-government. The extant literature of e-government provides a contribution to practitioners and researchers by describing the multifaceted applications of e-government to appeal to the different segments of e-government in order to maximize the public sector impact of e-government in the digital age.

#### **BACKGROUND**

Regarding e-government, ICT is an effective instrument for reducing the role of bureaucracy in government organizations (Cordella & Tempini, 2015). There has been a social evolution on the Internet recognized as the Web 2.0 (Waters, Burnett, Lamm, & Lucas, 2009). Web 2.0 is characterized by enabling and encouraging participation through open applications and through services with rights granted to use content in the new and exciting contexts (Chadwick, 2009). The adoption of ICT in public sector organizations has been associated with the e-government reform programs aiming at reducing the inefficiencies generated by the bureaucratic burden (Osborne & Plastrik, 1997). The levels of human and technological development of a country are the driving forces of e-government (Siau & Long, 2009).

Global interest in e-government has produced a wide range of internal and external evaluations of national performance in service delivery (Taylor,

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Marshall, & Amiri, 2010). E-government standard describes how governments work, share information, and deliver services to the internal and external stakeholders (Sun, Ku, & Shih, 2015). ICT artifacts are recognized as the linear catalysts of transformation of public sector organizations and structures (West, 2004). ICT diffusion leads to transaction integration, process reengineering, and administrative transformation, toward creating the citizen-centric government (Zhang, Meng, Guo, Yin, & Luo, 2015). Governments' investments in public sector information systems are correlated with organizational transformations designed to enhance the policy effectiveness (Gil-Garcia & Pardo, 2005).

## CHALLENGES AND IMPLICATIONS OF ELECTRONIC GOVERNMENT IN THE DIGITAL AGE

The overview of e-government; the adoption of e-government; the digital era governance (DEG) and new public management (NPM); and the significance of e-government in the digital age are described in this article.

### **Overview of Electronic Government**

Electronic government (e-government) refers to the use of ICT tools and applications to enhance the government transparency and accountability in the public administration by improving the public services delivery, access to information, and public governance (Chatfield & Alhujran, 2009). Transparency is recognized as a key value for trustworthy governments (Grimmelikhuijsen, Porumbescu, Hong, & Im, 2013). The scope of transparency is required to be carefully managed for the effective e-government in public sector organizations (Bannister & Connolly, 2011). The characteristics of good public governance include the improved transparency and accountability (Al-Hujran, Al-Debei, Chatfield, & Migdadi, 2015).

The promise of greater government transparency and accountability is the essential perspective for developing countries to take part in the egovernment projects (Chen, Jubilado, Capistrano, & Yen, 2015).

E-government projects can be technically complicated, and involve many customers, engineers, and regulatory authorities (Li, 2009). Many governments worldwide are still experiencing the practical problem of the low-level adoption of egovernment services by citizens (Rana & Dwivedi, 2015). The e-government adoption-related problem needs the urgent research attention since the success of e-government is highly dependent upon the citizens' adoption and the use of e-government services (Ozkan & Kanat, 2011). One of the main factors of the success of e-government is the development government websites (Rana, Dwivedi, Williams, & Weerakkody, 2015). Most extensive e-government measurements are tailored for the front-end website evaluation from the perspectives of citizens and businesses (Fan & Luo, 2014).

### Adoption of Electronic Government

The citizen's adoption of e-government services is an important issue for the success of e-government initiatives (Carter & Belanger, 2005). Prior research classified the e-government adoption literature into two streams (Reddick, 2005). The first stream studies the e-government adoption from the supply-side perspective, which reflects factors that are related to the supplier of public services (Al-Hujran et al., 2015). The supplyside perspective explores the factors that affect the government organizations' adoption and the implementation of e-government services (Li & Feeney, 2014). Examples of these factors concerning supply-side perspective include organizational characteristics (e.g., size, red tape, culture, and top management support), information technology (IT) infrastructure, financial resources, and skilled personnel.

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