

## Chapter 3

# Electronic Government Adoption Paradigms

**Mahmud Akhter Shareef**  
*McMaster University, Canada*

**Yogesh K. Dwivedi**  
*Swansea University, UK*

### ABSTRACT

*This chapter reviews literature on electronic-government (EG) and information and communication technology (ICT) regarding several management issues in general and adoption in particular. Since EG is a comparatively new area to investigate, many researchers have been addressing implementation, development, and adoption criteria. This chapter has five sections with sub-sections that delineate: 1) introductory information of EG development; 2) management issues related to EG; 3) EG implementation strategies and objectives; 4) design perspectives of adoption models, and 5) literature on online service quality, adoption, and related issues.*

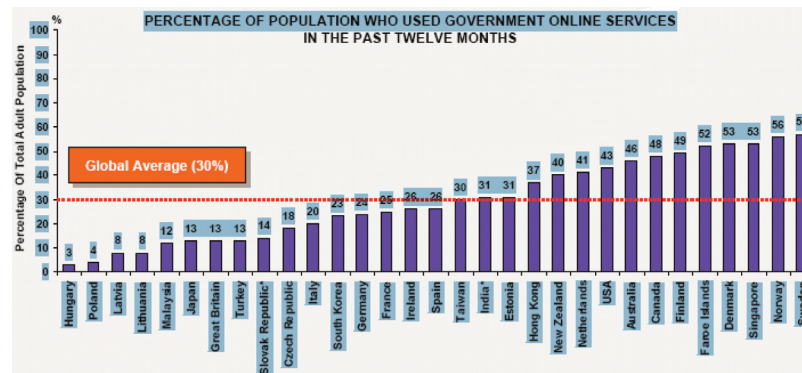
### INTRODUCTION

Adopting the EG structure is important because it can give citizens and governments a competitive advantage. Citizens can receive effective, efficient, and better quality service, whereas governments can reduce operational and management costs, increase transparency, and fulfill their political commitment to establish good governance. As Eggers and Goldsmith (2003) stated in their book,

*Governing by Network*: “The era of hierarchical government bureaucracy is coming to an end. Emerging in its place is a fundamentally different model which is called E-government in which government executives redefine their core responsibilities from managing people and programs to coordinating resources for producing public value.” In the USA, by offering the tax return system in EG through a transactional website, the Internal Revenue Service (IRS) is saving millions of dollars annually in government expenditures for the cost of printing, sorting, and mailing tax

DOI: 10.4018/978-1-60960-601-5.ch003

Figure 1. EG Adoption Rate of Citizens (Source: Taylor Nelson Sofres, 2002)



materials to citizens and business organizations (Warkentin *et al.*, 2002). EG services are cheaper, faster, more flexible, less time consuming, and available and accessible from anywhere and at any time. It also saves valuable time in traveling and waiting, particularly for citizens coming from remote areas to seek government services from physical government offices (Reynolds and Regio, 2001; Abanumy *et al.*, 2003; Prattipati, 2003). However, the main obstacle to attaining the strategic goals of EG is the low adoption rates (Ghaziri, 2003; Al-adawi *et al.*, 2005). Accenture's (2005) study of 22 leading countries in developing an EG platform found that the average EG maturity is 48 percent, with only two countries reaching 60 percent or above. As postulated by West's EG index (West, 2004), the same sample of countries has an average EG index score of 31.7 percent. The UN global EG survey (UNDP, 2003) proposed a readiness index to evaluate the service availability, maturity, and supporting level offered by 191 central governments in launching EG projects. The survey finds that the average government attains only 25.5 percent of the highest-ranking government's index score, with only seven governments achieving 75 percent and above. EG is far from reaching its full potential and, until the majority of the stakeholders fully adopt it to ensure the maximum productivity of the system, it is very difficult for governments and the United Nations

to proclaim the advantages of EG and justify large investments in EG. The present adoption rate of EG initiatives by stakeholders, especially citizens who are the prime stakeholders of government, is very low (Ebbbers *et al.*, 2008; Verdegem and Verleye, 2009). According to a study conducted by Taylor Nelson Sofres (2002), the average adoption rate globally for EG is still only 30 percent. The adoption rates for different countries included in that survey are shown in Figure 1.

However, to realize the full benefits offered or proclaimed by EG, adoption rates of stakeholders, especially citizens, must be increased. The more citizens use EG websites, the more the operation and management costs of EG will be reduced. After a thorough literature review addressing issues like the implementation, development, and adoption of EG (Moon, 2002; Accenture, 2003; Jaeger, 2003; Riley, 2003; Carter and Bélanger, 2004/2005; Gilbert *et al.*, 2004; Al-adawi *et al.*, 2005; Moon and Norris, 2005; Tung and Rieck, 2005; Evans and Yen, 2006; Sheridan and Riley, 2006; Gil-Garcia and Martinez-Moyano, 2007; Heeks and Bailur, 2007; Kumar *et al.*, 2007; Verdegem and Verleye, 2009; Robin *et al.*, 2009), we offer the following comments:

1. EG has initiated offering several services in static to interactions phase to provide efficiency and transparency.

57 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/electronic-government-adoption-paradigms/54120](http://www.igi-global.com/chapter/electronic-government-adoption-paradigms/54120)

## Related Content

---

### Enhancing Accessibility to E-Government Processes

Stefan Richter, Norbert Kuhn, Stefan Naumann and Michael Schmidt (2010). *Handbook of Research on E-Government Readiness for Information and Service Exchange: Utilizing Progressive Information Communication Technologies* (pp. 169-188).

[www.irma-international.org/chapter/enhancing-accessibility-government-processes/36477](http://www.irma-international.org/chapter/enhancing-accessibility-government-processes/36477)

### Sociopolitical Digital Interactions' Maturity: Analyzing the Brazilian States

Herman Resende Santos, Dany Flávio Tonelli and Paulo Henrique de Souza Bermejo (2014). *International Journal of Electronic Government Research* (pp. 76-93).

[www.irma-international.org/article/sociopolitical-digital-interactions-maturity/122484](http://www.irma-international.org/article/sociopolitical-digital-interactions-maturity/122484)

### Analyzing the Network Readiness Index in the United States to Assess ICT Infrastructure in Handling Crises Like COVID-19

Saeed Tabar, Sushil Sharma, David Volkman and HeeLak Lee (2021). *International Journal of Electronic Government Research* (pp. 1-14).

[www.irma-international.org/article/analyzing-the-network-readiness-index-in-the-united-states-to-assess-ict-infrastructure-in-handling-crises-like-covid-19/289353](http://www.irma-international.org/article/analyzing-the-network-readiness-index-in-the-united-states-to-assess-ict-infrastructure-in-handling-crises-like-covid-19/289353)

### Transparency in the Open Government Era: Friends or Foes?

Evika Karamagioli (2013). *Digital Democracy and the Impact of Technology on Governance and Politics: New Globalized Practices* (pp. 1-9).

[www.irma-international.org/chapter/transparency-open-government-era/74565](http://www.irma-international.org/chapter/transparency-open-government-era/74565)

### E-government Contribution to Better Performance by Public Sector

Emad Ahmed Abu-Shanab (2017). *International Journal of Electronic Government Research* (pp. 81-96).

[www.irma-international.org/article/e-government-contribution-to-better-performance-by-public-sector/185650](http://www.irma-international.org/article/e-government-contribution-to-better-performance-by-public-sector/185650)