E-Government Adoption Success Factors for Developing Countries

Anas Al-Aghbari¹, Othman Ibrahim¹, Faisal Saeed¹²
¹Department of Computer Science, Faculty of Computing, Universiti Teknologi Malaysia, Malaysia
²Information Technology Department, Sanhan Community College, Yemen
*Corresponding Author: anasmma1981@hotmail.com

Abstract

Adoption has a key role in a successful implementation of E-government initiatives in the context of developing nations. Until the current times, little research has been done to explore determinant factors of the adoption of E-government services among developing countries citizens. It is pertinent to determine the factors influencing the e-government services adoption and the government should understand such factors. Therefore, for an E-government to reach its full potential there is a need to decrease the gap between what is offered and what is utilized for fruitful government investment. So, this paper reviewed the studies of E-government adoption in developing countries. The aim of this study is to come up with the important success factors that influence the citizens in developing countries. There are many studies mentioned that privacy, security, trust, awareness is very important factors that affect E-government in developing countries.

Keywords: E-government Adoption; Success Factors; Developing Countries
1. Introduction

The success of E-government project is contingent upon users' willingness to adopt it. However, prior research has paid much attention to the citizens’ adoption [1-6]. E-government success depends on the adoption of its system and its actual use by the citizens of the country [7]. Partaking of E-government benefits is among the primary goals of governments. In fact, benefits provided by E-government rather than traditional services have urged governments to invest in E-government service implementation. Following implementation, several governments face the problem of benefits falling short of their expectations, and hence, most of them fail. It can therefore be concluded that E-government initiatives success depends on support from government as well as its adoption by citizens[8]. Owing to the fact that it is significant for technology users to accept the technology first [9] therefore, this paper highlighted the success factors that affect the E-government adoption in developing countries.

2. Methodology

This paper started by reviewing the studies on E-government adoption using the following keywords (E-government adoption, E-government services and E-government to citizens). The review focused on the IEEE and Scopus database. There are many papers discussed E-government adoption (77 papers in Scopus and 29 in IEEE). After reviewing these papers, the authors found the main 11 papers explained the E-government adoption in developing countries.

3. E-government Adoption

The adoption and use of E-government services remain restricted in most countries due to being guided largely by supply side factors [10-11]. According to Carter & Belanger [2], it is pertinent for the government to keep in mind that E-government success depends on the supplier side as well as the demand side (inclination to adopt online service).

Adoption is divided by Daqing [12] into adoption of information systems (IS) and usage. The adoption of IS is related to the decision to implement information systems and the post-adoption research is related to the ongoing use and the process of diffusion.

E-government adoption has been referred to by Warkentin [13] as the intention of the citizen to participate in government activity via online, and to receive information and services from the government. On the other hand, other authors have different descriptions – Carter & Belanger [2] described it as the intent to use, while Balestrini et al.[14] defined it as the willingness to use E-government services. Although the phrases used to describe E-government are different, they have the same meaning behind them which is the simple decision to use or not to use E-government services. To this end, the next E-government challenge is to make the citizen use the services frequently as using E-government once a year would not be deemed as a meaningful use of its many applications [15]. And for adoption, direct technology experience is required following technology acceptance [17].
Warkentin [13] described E-government adoption as the citizen intention to participate in government activity electronically to receive information and request services from the government. According to [2], it is intent to use, while [14] measure it as willingness to use E-government services. Altogether it can be stated as a simple decision to use, or not to use, E-government services. The next level of challenge of E-government is to make it frequently used by the citizen. Adoption comes after “direct experience with the technology and after an individual has decided to accept the technology [16-17].

So, the authors can conclude that E-government adoption is the decision to use E-government, use E-government and continue using E-government.

4. E-government adoption challenges in developing countries

E-government has been developed and implemented for a considerable period of time in developed countries, while implemented and developed in most developing countries is still in its infancy. Therefore, governments, businesses and citizens in developed countries have many benefits from using E-government services.

Moreover, in developed nations, E-government has made considerable developments in light of its implementation but in developing ones, it is lagging behind. According to several researchers, although governments of developing nations are convinced of the benefits of E-government, implementation challenges still exist and these include, privacy, security, trust, culture, computer and information literacy and IT infrastructure. Other specific challenges that prevent e-government implementation include authentication, digital divide and shortage of funding [22].

Although majority of developed countries are enjoying the benefits of E-government, there is still a significant room for improvement on a global scale. Some studies findings are consistent with other studies in that they found access to E-government services, trust, security concerns and digital divide as the main challenges faced in e-government implementation [18-21]. But a different take was provided by Ahmad [8] who revealed that the oversight of the needs and requirements of citizens is one of the reasons for low-level of e-government services adoption.

Thus far, E-government’s continuous expansion from North America to Asian countries are met with major challenges but taking benefit from the experiences of developed and developing nations, taking note of their successes and failures, and adapting such information to various environments is the basis of the E-government growth [1, 23].

In the past years, technology system has been expansively studies but the successful adoption of IT has largely been ignored [24]. E-government success hinges on the way governments encourage citizens to use online public services [12]. It is pertinent for decision makers to understand the factors that would boost citizens’ use of e-delivery channels. However, to date, studies dedicated to E-government services have been confined to developed rather than developing nations, particularly the Arab countries [25].
In this regard, adoption is a crucial aspect for E-government initiatives success in developing nations [26] but as stated, E-government services adoption by citizens in this part of the world has largely been ignored [17][27].

5. Conclusion

This paper reviewed the studies of E-government in developing countries to come with the success factors that influence the citizens to use E-government services. The main finding is that we found there are important factors should be considered for E-government adoption in developing countries, for instance, security, privacy, trust and awareness.

References