


# Assessing the Effectiveness of E-Government Services in Ghana: A Case of the Registrar General's Department

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## ABSTRACT

The adoption and implantation of electronic government service are on the rise as government services to citizens through electronic means has increased. However, assessing the effectiveness of e-government systems is still limited in the literature. This study evaluates the effectiveness and benefits of information systems (e-registrar) at the Registrar General Department (RGD) in Ghana, using the updated DeLone and McLean IS Success Model. Via the purposive sampling technique, data for the study were collected from 102 staff of RGD and analyzed following the Partial Least Squares Structural Equation Modelling (PLS-SEM) technique. The results of the study indicate that service quality, system quality, and information quality positively influence system usage and user satisfaction. Also, system usage and user satisfaction positively influence the net benefits derived from the e-registrar system. The findings provide a relevant recommendation to policymakers and management of organizations when it comes to information systems implementation.

## KEYWORDS

DeLone and McLean IS Success Model, E-Government, Ghana, PLS-SEM

## 1. INTRODUCTION

The technological advancement in recent times has been overwhelming and conspicuously evident in the modern ways of doing things, including governments providing information and rendering services to the citizenry, businesses, and other stakeholders electronically. Ojo et al. (2011) add to this assertion that governments all over the world continuously develop more erudite ways to digitize their procedures and practices so that they can render services to the public more efficiently and effectively. It is therefore not surprising that one of the leading verification, inspection, testing, and certification company globally, Standard Global Services (SGS) attest to this claim on its website that "Governments around the world are embarking on ambitious e-government programs with benefits such as enabling stakeholders to exchange information and public access to services electronically. Some of these services include tax management, land management, business registration, e-health, e-procurement, and e-payment" (n.d. SGS).

E-government has gained popularity in its use in public administration, covering areas such as service delivery, interactions with stakeholders, information dissemination, ensuring transparency and

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accountability, and also providing a one-stop-shop for all stakeholders (Stefanovic et al., 2016). This study concentrated on the services delivery function of e-government. The growing needs of citizens and the transforming global regulations and rules have put pressure on governments to provide quality services at the right time (Nkwe, 2012). Quality electronic government services (e-services) should not just be about their adoption and acceptance but their quality and benefit to various stakeholders should be paramount in assessing its success or effectiveness. E-government enables businesses, individual citizens, government organizations, and other stakeholders to interact with the government with ease, more rapidly, and less costly (Baharon & Yap, 2017).

According to the UN E-Government Survey Report 2018, Ghana has improved on its E-government Development Index (EGDI) for 2018. Seth (2018) asserted “EGDI is a composite indicator used to measure the readiness and capacity of national institutions of UN countries to use ICTs to deliver public services”. Ghana improved on its ranking from 120 out of 190 countries in 2016 to 101 in 2018. There has been steady progress over the years as Ghana ranked 123 in 2014, 145 in 2012, 147 in 2010, and 138 in 2008 (Agboh, 2017).

Since the successful implementation of e-service projects also require training and further capacity building of government employees (UN E-Government Survey, 2014), it is, therefore, necessary to evaluate e-services, not solely from the citizen’s viewpoint but the perspective of public employees as well. This work strived to theoretically and empirically validate a model to evaluate e-service performance from the perspective of the public employee as a primary user, in the Ghanaian context.

Although E-government has been adopted and used by many economies around the globe including Ghana to deliver businesses and citizens with more real-time, accurate, and high-quality services and information (Mensah, 2016b), a phenomenon that has attracted many research works or studies, however, the literature search shows that most studies in the area of e-government centered on assessing e-readiness, e-government implementation, and acceptance in Ghana and beyond. For example, Enock (2015) revealed that the Government of Ghana (GoG) is dedicated to the quest to digitalize operations in the public sector. Mensah (2016a) also found a massive obligation from the GoG to embrace and implement e-government as a transformational tool not only to renovate the business for government businesses but also to improve efficiency in public service delivery by Ministries, Department, and Agencies (MDAs).

Like any new intervention implemented, there is the need for a robust monitoring and evaluation system installed to track progress to ensure value for money, especially when the resources committed to these interventions are so huge in the case of e-government service projects (Peristeras et al., 2009). The literature on e-services assessment exist in other jurisdiction and are mostly conceptual and also focused largely on citizens perspective (Sigwejo & Pather, 2016). It is however limited in the context of Ghana, thereby creating a contextual and knowledge gap. To fill these gaps in the literature, this study aims to empirically and theoretically assess the effectiveness of the e-government service delivery system in Ghana after its adoption and implementation from the perspective of employees of an organization using an e-government system to deliver services. Thus, the research study used the Registrar General’s Department (RGD) as a case study since RGD has implemented the E-Registrar as one of the MDAs selected to pilot the GoG e-services initiative in 2011. The research objectives are:

1. To ascertain the challenges that existed in business registration in Ghana before the introduction of E-Registrar.
2. To evaluate the performance of the E-Registrar in Ghana concerning its effectiveness.
3. To examine the achievements and existing challenges in using the E-Registrar.

To achieve the above research objectives, this study sort to find responses to the research questions below:

1. What are the main challenges that existed before the introduction of E-Registrar?

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