

# Efficiency and effectiveness assessment model for m-government

[Business](#), [E-Commerce](#)



The paper "Efficiency and Effectiveness Assessment Model for M-Government" is a wonderful example of an assignment on e-commerce. Promoted by demands for a more responsive government, governments all over the world have acknowledged the potential of mobile technology (m-technology) in reengineering their service structure and service delivery for higher efficiency, cost-effectiveness, transparency, and accountability through transformational government initiated by m-government (Westland & Al-Khoury 34). The United Arab Emirates (UAE) has been on the forefront in pursuing m-government initiatives, with the view to delivering more information and online services to its citizens, businesses, government agencies and others (OECD 24, 32, 54). The objective of the present study is to demonstrate an assessment model that could be used to evaluate the efficiency and effectiveness of m-government initiatives (smartphone applications) within the UAE. The justification to undertake this study stems from the fact that the assessment model could be used by government and other stakeholders not only to identify possible gaps in the efficiency and effectiveness of m-government initiatives using smartphone applications but also improve the delivery and uptake of m-government initiatives in the UAE. This study adds to the existing body of knowledge on the factors and metrics that could be used to assess the efficiency and effectiveness of m-government within the UAE's context. Available literature demonstrates that m-government, which is ostensibly viewed as a subset of e-government, implies "the use of mobile and wireless communication technology within the government administration and its delivery of services and information to citizens and firms" (El-Kiki & Lawrence 1). By enabling the development

and adoption of a whole new set of government to citizen (G2C), government to government (G2G), government to business (G2B) and government to employees (G2E) applications and services, m-government affords, for example, a dominant and transformational capability to expand access to existing services, to broaden the scope for the delivery of new services, to enhance active citizen participation in government operations, and to dynamically shift the way of working and interactions within the public sector (International Telecommunication Union 25). In assessing the IT factors and metrics used to measure the efficiency and effectiveness of various strategic initiatives such as m-government, available literature shows that “ mobile technologies provide government with significant opportunities for achieving greater cost optimization, improved communications, and data coordination, expanded service delivery and much progress towards digital equality” (International Telecommunication Union 40). Efficiency factors mentioned in the literature include: larger and wider user base, mobility and ubiquity, better precision and personalisation in targeting users and delivering content, cost-effectiveness, utmost availability of information (timeliness), more convenient accessibility and availability, courtesy and helpfulness, accuracy, better management of information, trust, privacy and security (International Telecommunication Union 40-45; El-Kiki & Lawrence 4-5; Kushchu & Borucki 4-5). Other efficiency metrics include faster throughput and transaction speed, system availability, reliability, responsiveness, good coordination and communication, the accuracy of the disseminated information, and faster response time (Westland & Al-Khoury 35-37). Effectiveness factors mentioned in the literature include ease of use of the

mobile applications, interface design, customer satisfaction, high conversion rates, perceived usefulness of the mobile applications, value for money, high quality of service and customer control (Westland & Al-Khoury 37). The researcher conducted a descriptive survey to investigate the factors that are central to the efficiency and effectiveness of m-government services using smartphone applications. A small sample of 20 participants was drawn from users of smartphone devices to search for government information through EDGE or UMTS ubiquitous internet access. The participants were requested to use a Lickert-type scale (1= least important, 5= most important) to rate several factors related to the efficiency and effectiveness of the smartphone application, as follows: Item 1: On a scale of 1 to 5, please rate the following variables related to the efficiency of the smartphone application (variables = wide usage; mobility and ubiquity; personalisation of services; convenience; trust; privacy; security; courtesy and helpfulness; faster throughput; faster transaction speed; system availability; responsiveness; good coordination and communication; accuracy of information; and faster response time). Item 2: On a scale of 1 to 5, please rate the following variables related to the effectiveness of the smartphone application (variables = ease of use; customer satisfaction; interface design; high conversion rates; perceived usefulness; value for money; the high quality of service; and customer control). The survey findings resulted in ideas for efficiency and effectiveness factors that are highly valued by users of smartphones to access government information and services through EDGE or UMTS ubiquitous internet access. Based on the study findings, a model can be developed to assess the efficiency and effectiveness of the smartphone application and other m-

government initiatives within the UAE context. To simplify the model, it is imperative to group all the tested variables into five key domains, namely perceived value, quality of services, efficient transaction, functionality, and citizen-government engagement. Consequently, the proposed model is as follows. The model above can be used to assess the efficiency and effectiveness of the smartphone application and other m-government initiatives. It is important to note that the efficiency of the m-government initiative is assessed using three broad domains, namely perceived value (faster throughput, faster transaction speed, precision and personalisation, mobility and ubiquity, and faster response time), quality of services (availability, accuracy, responsiveness, reliability, and courtesy and helpfulness), and efficient transaction (timeliness, privacy and security). On the other hand, the effectiveness of the m-government initiative is measured using two broad domains, namely functionality (usability, interface design, accessibility, and high conversion rates) and citizen-government engagement (customer satisfaction, cost, customer control and high quality of service). The detailed model is all-inclusive, implying that it can be employed by government agencies and other stakeholders to identify possible gaps in the efficiency and effectiveness of m-government initiatives using smartphone applications within the UAE context. Additionally, the model has been developed according to the criteria of simplicity, comprehensiveness, generality, exactness, and clarity (Westland & Al-Khoury 45), implying that it should be easy and straightforward to identify possible gaps in m-government initiatives particularly with regard to the achievement of efficiency and effectiveness. Going forward, it is conceivable to argue that

this model promises greater adoption and uptake of m-government services within the UAE context due to its inclusiveness in the metrics and factors that are used to assess the efficiency and effectiveness of m-government initiatives. Several recommendations arise from the development of this model. Firstly, it is recommended that particular metrics and factors for assessing efficiency and effectiveness of m-government initiatives be grouped into clear domains (e. g., perceived value, quality of services, efficient transaction, functionality, and citizen-government engagement) for ease and comprehensiveness of an assessment. Secondly, the evaluators (government agencies and other stakeholders) should evaluate the metrics and/or factors along the key domains to know if they meet customer requirements for optimal adoption and uptake of m-government services. Lastly, users of this model require a deeper understanding of the needs and expectations of consumers of m-government services if they are to propose solutions that enhance the efficiency and effectiveness of various m-government platforms found in the UAE.