

Original Research Paper

## Review the Success of the Mobile Government from the Government Perspective

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**Abstract:** The researchers agreed on the potential of the mobile government as a new channel of communication between the government and citizens if the mobile government eliminates the traditional organizational structure of government, thus changing the way information is exchanged between them, and provide government services in a transparent manner at anytime and anywhere. For the education sector, mobile education initiatives must be successful in educational institutions must choose the appropriate technology in proportion to its infrastructure to conserve resources and reduce the stress of change. Therefore, this research seeks to present the most important factors of success explored by researchers in their studies, using different research methods in different countries, and trying to classify these factors from the perspective of the government and citizens. The methodology used in this research is to review the literature on the success of mobile government from a government perspective, in order to determine the success factors adopted by each study, and then categorize the success factors according to the degree of their impact on the successful implementation of the mobile government. The final stage is a model proposal for mobile government success.

**Keyword:** Monitoring, Controller, Solar Cell, Web Server, Micro-controller.



## 1. Introduction

In the past decade many governments have moved towards e-government. Today, however, some governments have noted the high penetration of mobile devices that have surpassed PC adoption in many countries and are beginning to move naturally towards the mobile government as a next step to improving their interaction with citizens.

Governments are therefore improving their services by adding a mobile government as a new conduit using the available wireless infrastructure installed by mobile operators. These governments have realized that the mobile government ensures access to more citizens and the provision of real-time information for real-time decisions.

In order to successfully implement the new mobile government in the public sector, governments use the experience of other governments that preceded it in implementing the mobile government. However, the mobile government is still in its infancy, and very few governments have fully implemented mobile government services. In fact, most of the services provided are basic SMS services (SMS).

The aim of this paper is to review the literature on the success of mobile government from a government perspective, in order to determine the success factors adopted by each study, and then categorize the success factors according to the degree of their impact on the successful implementation of the mobile government. The final stage is a model proposal for mobile government success.

## 2. Methodology

The methodology used in this research is the extensive revision of literature. The search uses secondary data. Data obtained through previous studies. The research objectives focus on the success factors of mobile government from a government perspective.

To achieve the research objective, the following steps have been taken:

1. Identify keywords that were "successful mobile government", "success factors" or "empowerment factors" and arrange them as a search query, this search query carry out in three reliable indices namely, IEEE, web of science, and science direct
2. Sorting the studies according to the perspective that dealt with success in "Government perspective, citizen perspective, and expert perspective. After filtering the results, we got 15 study related to m-government based on Government perspective.
3. Selection of studies that dealt with success from the perspective of the government.
4. Determine the frequency of each factor of success in the specific studies.
5. Rank the factors according to their importance (repetition) to three levels of high, low and high impact.
6. Proposing a conceptual model for mobile government success from a government perspective. The figure 1 illustrates research methodology.

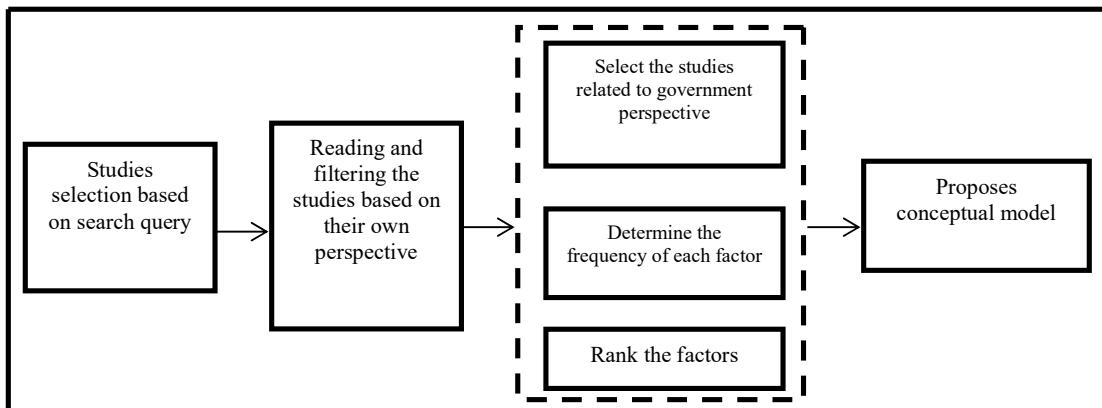


Figure 1. Research Methodology

### 3. Critical Analysis Output: Success Factors for Implementing M-Government

To ensure the successful implementation of mobile government services, it is important that success factors be identified from the government's point of view and work to ensure that their services are successful.

This is often a challenge. For this reason, an analysis of the documents was carried out in this paper, in order to give an initial picture of the factors of success for the government agencies.

This research is expected to provide a basic guidance for researchers to propose a more comprehensive and appropriate model for the successful implementation of government services from a government perspective. As shown in Table 1.

Table 1. Success Factors of the Mobile Government

Ref	Cost	re-engineering	Acceptance	Education	Accessibility	Technical	Organizational	Security	privacy	Social	Transparency	Infrastructure	User need	Quality	Standards	Awareness	Strategy	IT literacy	Portals	partnerships	legal issues	M-G framework	leadership	learning	Soft skills	Involvement	Centralization	Usability	Trust
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<b>Total (15)</b>	<b>6</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>5</b>	<b>7</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>%</b>	<b>40</b>	<b>13</b>	<b>33</b>	<b>13</b>	<b>33</b>	<b>46</b>	<b>27</b>	<b>73</b>	<b>33</b>	<b>20</b>	<b>13</b>	<b>33</b>	<b>13</b>	<b>7</b>	<b>27</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>7</b>	<b>13</b>	<b>13</b>	<b>7</b>	<b>13</b>	<b>13</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>13</b>

According to Table 1, the factors considered the most common factors, and have been adopted by studies on the success of mobile government; the security factor reached the highest percentage of 73%, followed by the technical factor at 46%. The cost factor ranked third, with 40%. The following factors Acceptance, Access, privacy, and Infrastructure, they were equal in proportion to 33% each.

Some studies have focused on other factors to study the success of mobile government implementation. The percentage of regulatory factors, standards and Organizational was equal to 27% per worker. Social factors, awareness, strategy, and IT literacy were also equal to 20% per worker.

The factors that reached a percentage of 13% were: education, leadership, legal issues, partnerships, transparency, trust, user need, and learning. The remaining factors, it reached 7%, namely: centralization, involvement, M-G framework, portals, quality, soft skills, and usability.

Figure 2 shows the frequency of these factors.

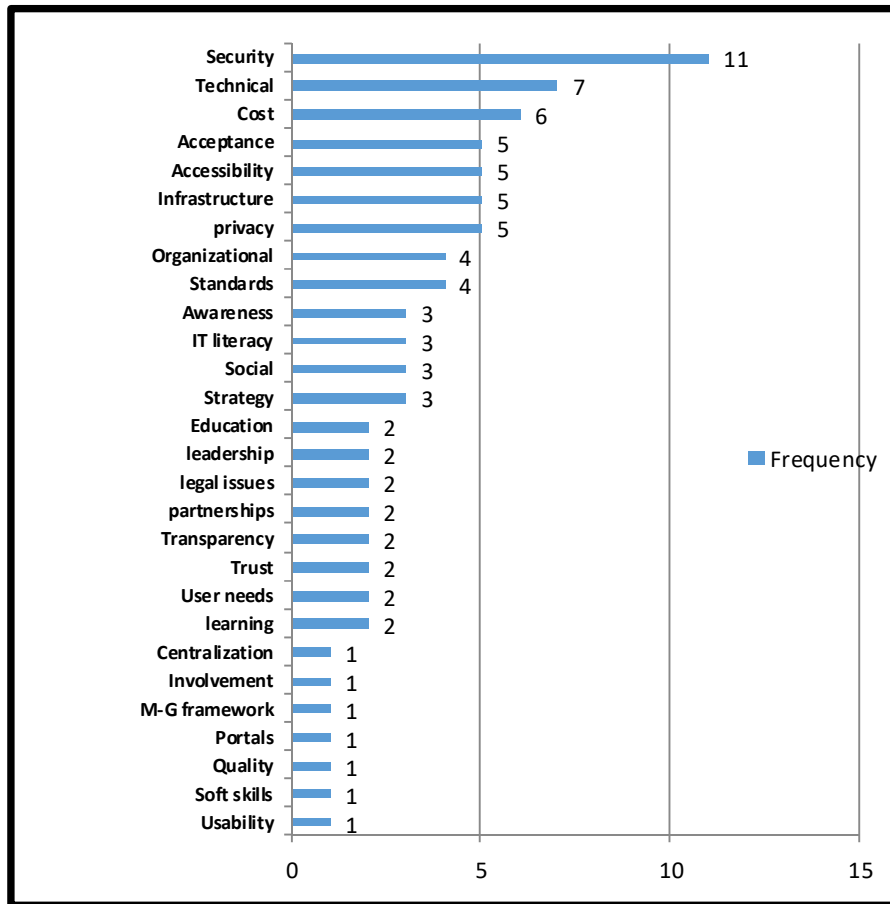


Figure 2. Frequency of the Factors Adopted In the Studies

Through the figure shown, the factors can be divided according to the degree of their impact on the successful implementation of the mobile government.

#### 4. Discussion the Core M-government Success Factors

As a result of a review of the success of the mobile government from the government's point of view, 27 workers were identified. These were divided into three sections according to the degree of their impact and frequency in the studies. The first part relates to the factors that have a high impact on the success of the mobile government, namely security factor, technology factor, and cost factor. While six factors had an average impact on the success of the mobile government.

The last section included 18 factors that have a low impact on the success of the mobile government, it was mentioned in only one study or two studies, Figure 2 illustrates these factors the effect of Figure 3.

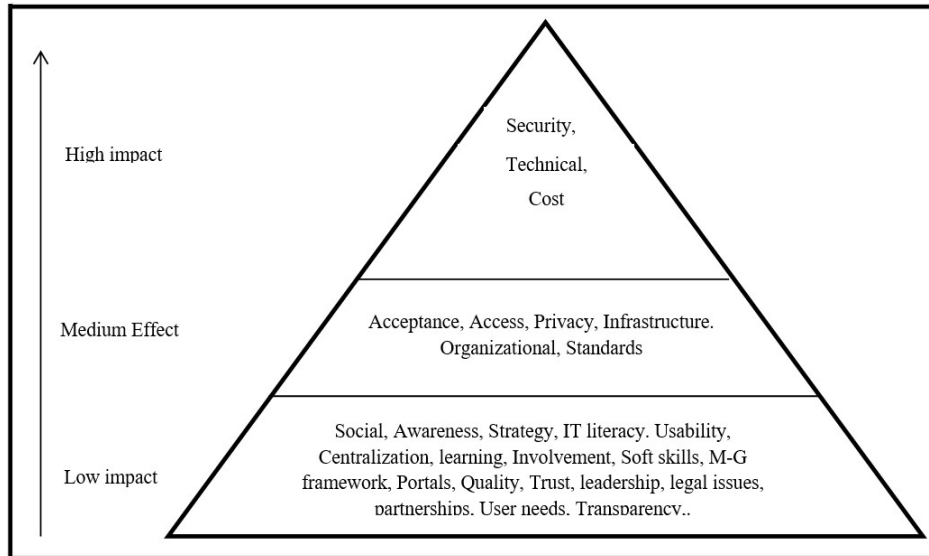


Figure 3. Effect of Success Factors

Based on the degree of influence of the factors on success, the high-impact and medium-impact factors were selected in our model and described in Figure 4. The following is a brief explanation of these factors.

- Security Focus on communication stability by relying on service level agreements (SLAs) from telecom providers and applications. Focusing on data integrity is vital regardless of the interface, especially with respect to loss and theft. Audit transactions and transparency of financial interactions. Smooth transition to future improvements, and secure data storage through minimal inter-agency duplication [1, 2].
- Technical It includes a range of issues interoperability, open-source, scalability and reliability. Believe that the main limitations for mobile government are the limitations of mobile devices themselves, such as low memory and size, no common standards [3].
- Cost The government should provide public funding for infrastructure and joint venture options with private operators. High initial investment and cost recovery or return on investment. Political factors and audit / regulatory considerations. Ability to obtain a single audit trail for transactions and to make procedural comparisons. Achieve the cost benefits of long-term contracts with telecom operators (telecom operators) and application vendors [4].
- Acceptance Focus on providing seamless services by the agency or appropriate management across a unified mobile radio interface. CRM interface for mobile wireless citizens. Practical participation by citizens in the development of state governments. Management of inter-agency relations and departments. Regular public review and communication with e-government initiatives [3, 5].
- Accessibility The wireless network now has wide coverage. Government agencies must develop plans to provide access to government information and services via text to wireless access devices, as well as to facilitate access to information by all citizens via the web or other communication technologies [6, 7].
- Privacy Privacy is a very important factor in wireless communications because of an anonymous connection to a wireless connection. If citizens want government agencies to protect their basic data from moving into the hands of unauthorized agencies or hackers, to prevent misuse [8].
- Infrastructure This issue is two-fold: (1) e-government applications upon which m-government applications are built and (2) different browser platforms for wired and wireless internet access. M-government must be built on a sound e-government infrastructure

- i. e. the backbone of digitalized government must be present to optimize the mobile/wireless technologies for final delivery of government information and services. Second, there are multiple platforms for mobile/wireless applications ranging from Wireless Application Protocol (WAP) and GSM to DoCoMo's (Japan) I-Mode [3, 9].
- Organizational emphasis should be placed on organizational factors and competencies that enable the successful implementation of the mobile government by solving issues of centralization, participation, leadership and learning [10].
- Standards Lack of mobile technology standards which will lead to increasing cost of implementing mobile government since each country will spend money alone on developing its own customized mobile systems [3].

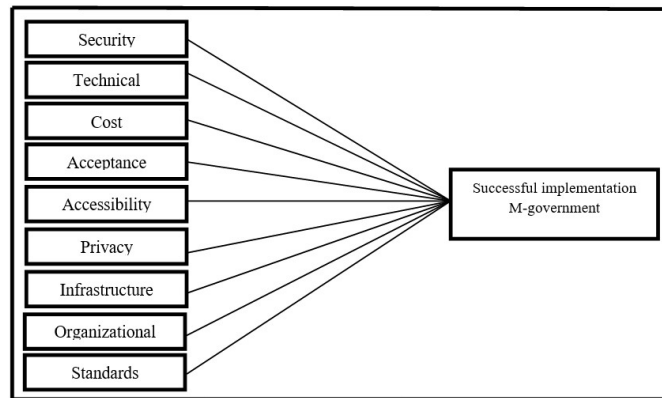


Figure 4. Mobile Government Success Model

## 5. Implementation of Mobile Government in Education through Mobile Learning

In theory, mLearning increases access to those who move or cannot actually attend educational institutions - those who are unable to follow courses in a traditional learning environment because of their circumstances. Education through mobile makes education easier because it corrects learners' chance to pursue their studies according to their own schedule [11]. The process of introducing mobile technology into education means that education is being done remotely without being committed to specific times. mLearning education provides an opportunity for learning at anytime and anywhere [12].

Mtebe & Raisamo [13] suggest that mobile education leads to increased access to situations where cost is a major impediment to learning. For those living in rural or remote areas where they face a range of challenges such as environmental challenges and infrastructure for other learning methods, mobile education offers great opportunities [14]. In regards to cost, the benefit of increased access afforded by mLearning is particularly in regards to cost, the benefit of increased access afforded by m-Learning is particularly relevant in the developing country context. Many developing countries are completely bypassing investments in costly, fixed telephone infrastructure for the installation of mobile phone networks [15]. mLearning allows for a more cost-effective learning method than e-learning, and the proliferation of mobile phones means that many people have knowledge of mobile applications [16].

## 6. Conclusion

This research has identified and discussed the preliminary findings of the review of literature and studies that have been specialized in studying the factors of success in the mobile government from the perspective of the government. From this review, nine key factors were identified for success, divided into two highly successful success factors: security, technology, and cost factors. And moderating factors acceptance, access, privacy, infrastructure, organizational, standards. A model for mobile government success has been proposed, to give a preliminary picture of the government on the

most important factors of the success of the implementation of the mobile government to focus efforts on them.

For the education sector, mobile education initiatives must be successful in educational institutions must choose the appropriate technology in proportion to its infrastructure to conserve resources and reduce the stress of change. The infrastructure requires an assessment of the suitability, quality, compatibility and cost of the equipment. Issues such as learning management through intermittent communication of enterprise learning management systems (LMSs), as well as maintaining independent delivery of devices, pose major obstacles to the implementation of education by telephone. It should also focus on accessibility, security, privacy and ethical concerns. In terms of application, problems of teachers' lack of confidence, training and technical difficulties with the devices used may affect their use and use negatively.

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