

Unlocking Success: Key Information System Factors for Smart Governance *

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Abstract

This study investigates the information system success factors for smart governance, focusing on the empirical application of the DeLone and McLean Information System (IS) Success Model within the field of e-governance. This research underscores the importance of these dimensions in enhancing the efficiency, transparency, and responsiveness of e-governance services.

Keywords

smart governance, information system success factors, DeLone and Mclean model

1. Introduction

One of the prominent models have emerged to assess the effectiveness of information systems is DeLone & McLean IS Model. This model shares the goal of understanding IS success with a distinct approach and offer valuable insights [1]. The model consists of system quality, information quality, service quality, intention to use/use, user satisfaction and net benefits as illustrated in Figure 1. The DeLone & McLean model emphasizes the interrelationships between these dimensions, suggesting that a successful IS will perform well across all six areas [2].

Criteria	Description						
Overview	Comprehensive framework for evaluating Information System (IS) success. Established in 1992, updated in 2003 to reflect changes in the digital environment.						
Success Factors	<table border="0"><tr><td>System Quality: How well the system performs technically. Usability, adaptability, and response time.</td><td>Use: How the system is utilized by end-users. Degree and breadth of system's utilization.</td></tr><tr><td>Information Quality: Relevance, accuracy, and timeliness of the output. Understandability and format of the information.</td><td>User Satisfaction: Degree to which users believe the system meets their requirements. Feedback, surveys, and user reviews.</td></tr><tr><td>Service Quality: Quality of support from service providers. IT support, helpdesk efficiency, and training.</td><td>Net Benefits: The tangible and intangible benefits realized from the system. Increased productivity, cost savings, or enhanced decision-making.</td></tr></table>	System Quality: How well the system performs technically. Usability, adaptability, and response time.	Use: How the system is utilized by end-users. Degree and breadth of system's utilization.	Information Quality: Relevance, accuracy, and timeliness of the output. Understandability and format of the information.	User Satisfaction: Degree to which users believe the system meets their requirements. Feedback, surveys, and user reviews.	Service Quality: Quality of support from service providers. IT support, helpdesk efficiency, and training.	Net Benefits: The tangible and intangible benefits realized from the system. Increased productivity, cost savings, or enhanced decision-making.
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Importance	This model is regarded as the most comprehensive IS assessment model within the body of IS research.. Allows organizations to holistically evaluate and improve IS initiatives.						
Applications	Evaluating new IS deployments. Continuous improvement of existing systems. Model is improved to evaluate electronic application (e-commerce)						

Figure 1: DeLone and Mclean IS Success Model

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2. Research Gap

There have been significant advancements in identifying factors for the success of information systems but there is a noticeable lack of research in smart governance [3]. Current studies frequently ignore the distinct hurdles and needs of smart governance projects, which involve incorporating sophisticated technological components as well as crucial social aspects such as citizen participation and digital inclusiveness [4].

2.1 DeLone & McLean extended to Public Value Theory Value Theory

The authors [3] found that a broader access to information communication technology (ICT) positively influences the overall performance of e-government services. The study expanded the scope of e-government success indicators by applying public value theory to measure non-financial benefits and the DeLone and McLean model. This result suggests that enhancing ICT accessibility will lead to greater utilization of e-government services and amplify their worth. Among these factors, service quality had the most substantial impact on the actual utilization of e-government services. Essentially, the study highlights the importance of ICT accessibility as a catalyst for generating public value by encouraging citizens to engage more with the government through e-services. However, the model lack in terms of trust and security of ICT access to facilitate greater use of e-government by the public.

2.2 Appraising the Success of E-Government

The researchers [5] in this study, investigates the success of e-government systems in developing countries, incorporating perceived usefulness and perceived trust variables into the IS success model. The study finds that information quality, system quality, and service quality of DeLone and McLean model significantly affect the use of e-government systems, user satisfaction, and perceived usefulness. The paper recommends focusing on these quality dimensions and launching awareness campaigns to motivate citizens to use e-government services. The study focuses on the perspective of a developing country, which may limit the generalizability of the findings to other contexts. While the study incorporates perceived usefulness (PU) and perceived trust (PT) variables into the framework, there may be other factors that could influence the success of E-Gov systems that were not considered in this research.

3. Conclusion

In conclusion, while the DeLone and McLean Information System Success Model remains a highly influential and widely validated framework, empirical studies suggest that it could be further refined and extended to better capture the complexities and specificities of modern information systems, particularly in the context of smart governance.

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