Chapter 6
Factors Affecting Citizen Intention to Use Smart City Services in Morocco:
A Systematic Literature Review and Conceptual Framework

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ABSTRACT

In many developing countries, smart city initiatives are in their infancy. Like many other developing countries, smart projects in Morocco have been facing several challenges since their launch in 2016. The adoption of smart services requires the commitment and involvement of Moroccan citizens. This chapter focuses on a systematic literature review of the main studies dealing with factors that appear to improve end-user acceptance of services provided by Moroccan smart cities. A specific method known as PRISMA is being adopted to select and synthesize relevant studies in this field. The results obtained from the systematic review indicate that the unified theory of acceptance and use of technology (UTAUT) is the most utilized theory in the literature. Additionally, the examination of existing studies has revealed that successful implementation of smart projects requires decision-makers to consider the following factors: performance expectancy, ease of use, social influence, perceived cost, awareness, trust in technology, and trust in the government.

1. INTRODUCTION

In recent years, smart cities have been more popular than ever because they provide new solutions in the areas of mobility, environment, economy, governance, quality of life, and education, thanks to the innovative use of Information and Communication Technologies (ICT)(Nassereddine & Khang, 2024).

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Generally, the interest in smart cities is closely linked to the rise of new information technologies such as mobile devices, semantic web, cloud computing, and the Internet of Things(Syed et al., 2021). The term "smart city" was adopted in 2005 by a number of technology companies offering complex information systems to their clients, aimed at integrating the operations of urban infrastructur(Savastano et al., 2023). Several other non-technological factors have led to the broader adoption of a smart city strategy: the increase in city size, the need to protect the environment from pollution and energy consumption, or the increased demands of citizens for public services(Jebaraj et al., 2023).

Although the technological aspects of smart cities have been well covered in the literature, the crucial role of citizens in these cities has often been overlooked(Jebaraj et al., 2023). Too often, smart cities have not achieved their goals because citizens have not been adequately involved in their definition or because the impact on their daily lives has not been taken into account(Del-Real et al., 2023).

In the field of research on smart cities, many authors have emphasized the importance of discussing citizen participation in a smart city. However, until now, very little has been written about the various facilitators of citizen participation in the context of a smart city.

A smart city is an innovative urban area that leverages Information and Communication Technologies (ICT) to promote robust economic activity, enhance the overall quality of life, and foster sustainable development. We are currently observing a highly interconnected and complex world, necessitating the development of improved methods for exchanging and transmitting information across many participants in common spaces, such as urban areas.

ICT infrastructure has a crucial role in enhancing and facilitating social and urban development, fostering public engagement, and boosting government efficiency in smart city contexts. From the viewpoint of the citizens, the integration of Information and Communication Technology (ICT) is crucial for the functioning of intelligent cities and enterprises. Smart city services enhance the living environment and enhance the quality of life for citizens. Smart city services encompass a wide range of applications that address common challenges including mobility, public services, and security. The pandemic problem has recently emphasized the crucial importance of these smart city services.

Cities are compelled to adopt new methods of urban management in order to fulfill the demands of territorial competitiveness. Currently, there is a global inclination to adopt smart city standards by investing in the digitalization of diverse public services in urban areas. Recently, numerous endeavors have been undertaken in various Moroccan cities to enhance their appeal by engaging in a process of promoting and enhancing their territories through the execution of substantial infrastructure projects and the digitalization of municipal administration(Haj, 2020).

Morocco is betting on transforming six cities into smart cities by 2026 (Ministry of Industry, 2013). The project has already begun in Casablanca in 2016, with Marrakech, Rabat, Tangier, Ifrane, Berkane, and Fez to follow. Morocco aims to create a new model of urban management at a lower cost, improve the efficiency of urban planning, and achieve sustainable social development that meets citizens' needs in terms of transportation, energy, green economy, security, and housing.

However, for these smart administration initiatives to be successful, citizens must understand and accept online administration services(Del-Real et al., 2023; Junaidi et al., 2024). The effectiveness of adopting intelligent public services relies on the perception of the online administration effort by end-users. The end-users may not have a positive reception of the currently available technology. The existence of a smart city is rendered pointless if end-users do not successfully utilize online administration services.