


# Chapter 5

## Smart Cities and Digital Governance

**Mamoona Humayun**


*College of Computer and Information Science, Jouf University, Saudi Arabia*

**N. Z. Jhanjhi**

 <https://orcid.org/0000-0001-8116-4733>

*Taylor's University, Malaysia*

**Malak Z. Alamri**

 <https://orcid.org/0000-0002-3484-0994>

*Jouf University, Saudi Arabia*

**Azeem Khan**

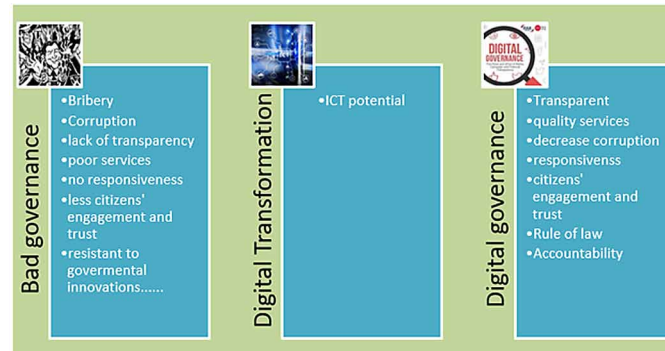
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### ABSTRACT

*With the ubiquitous low-cost sensor devices and widespread use of IoT, the paradigm is shifted from urban areas towards a smart city. A smart city is an urban area that uses IoT technologies to collect data and manage resources efficiently. The vision is to improve the capabilities and to solve the citizens' problems (e.g., energy consumption, transportation, recycling, intelligent security, etc.) in an efficient way. A smart city is a multidimensional term including a smart economy, smart mobility, smart living, smart environment, smart people, and smart governance. Although the concept of a smart city is increasing and currently there exist many such cities in many developed countries, one of the key challenges faced by these cities is good governance. Smart cities need smart governance to run the city in a smarter way, and effective digital governance is a solution to this end. Digital governance refers to the use of digital technology in government practices.*

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Figure 1. Digital governance



## INTRODUCTION

There exists no definitive explanation of smart city due to the wide variety of technologies incorporated in smart cities' infrastructure. However; the smart city is a designation given to the city/urban area which incorporates information and communication technologies (ICT) to increase the quality of services such as security, energy consumption, transportation, and other required utilities by reducing resource consumption and wastage of city resources (Abu-Matar, 2016; Musa, 2016). In order to effectively manage smart cities, smart administration is required that can be achieved through smart governance. Digital governance or smart governance are the two sides of the same coin. Digital governance includes the use of ICT in creating a progressive and effective government and public partnership so that all sections of a smart city become strengthen and integrated (Jucevičius, Patašienė, & Patašius, 2014; Nam & Pardo, 2011; K. Paskaleva, 2013).

Smart cities are very important segments of society whose sustainability depends on efficient digital governance. Digital governance of smart cities aims to make the system of these segments transparent so that a common citizen is well informed of all government information. In digital governance, government information does not remain limited to a particular community rather it is accessible by all sections of society (Coe, Paquet, & Roy, 2001; Meijer, Lips, & Chen, 2019).

Developed countries in the world are paying more attention to the development and governance of smart cities from more than a decade ago. Now, the developing world is also following the same trend. Cities are developed based on smart city model using latest ICT, and strong digital governance is used to strengthen this infrastructure (Chourabi et al., 2012; Mora, Bolici, & Deakin, 2017). This smart governance has given positive results across regions. Web-portals, mobile apps, online forums, and other online services have helped citizens to share their queries, experiences and suggestions to government authorities. Similarly, there exist apps that help citizens to report crimes and bribes happening in the society, complaints about a area, suggestions regarding government policies, tax portals, and security apps for public safety. All these ICT tools help in improving the governance of smart cities (Anand & Navío-Marco, 2018; Viale Pereira, Eibl, & Parycek, 2018; Webster & Leleux, 2018). Figure 1 shows the importance of digital governance for smart cities.

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