

Challenges Facing e-Government and Smart Sustainable City: An Arab Region Perspective

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Abstract: Information and Communication Technologies (ICT) have affected recent public administration and governance. Electronic Government (e-government) services were developed to simplify government procedures and improve interaction with citizens, on one hand, and to create new governance models to empower citizens and involve them in the decision-making process while increasing transparency on another hand. According to the literature, implementing e-government applications and technologies would enable the country to address the fundamental questions of how cities function, how they are organized, and how businesses and processes could be made intelligent for citizens. By answering these questions, the country would be putting the grounds to enable the transformation towards Smart Sustainable Cities (SSC). Recently, the concept of SSCs gained importance as a mean of making ICT enabled services and applications available to increase the citizens' quality of life and improve the efficiency and effectiveness of the services provided by governing entities and businesses. There is still no common agreement on what a SSC means in practice; however a SSC is characterized by Smart Economy, Smart People, Smart Governance, Smart Mobility, Smart environment and Smart Living. Implementing e-government and transforming towards SSCs is faced with various challenges. Some of the challenges are common across the regions of the world and others are specific to one region or even to a country within a region. Despite these challenges, the Arab region has been embarking onto the e-governance wave for the past few years. It showed a notable progress in implementing e-government services; however, variance exists in the implementation of these services even among the countries of the region. Selected Arab countries have exerted considerable efforts in implementing e-government thus paving the way for smart governance, which is a main characteristic to consider for implementing a SSC. However, literature indicates a variance in the pace of the transformation towards SSCs. This variance is noted across countries in the Arab region and across the cities within one country of the region. Studying the challenges facing the implementation of e-government services therefore affecting the transformation towards the SSCs in Arab Countries is needed. This paper aims at exploring, the definitions of e-government and SSCs in addition to the challenges facing the implementation of e-government in the Arab region and the transformation towards SSCs. This paper also presents practices from the Arab region about the realization of e-government and the transformation towards SSCs.

Keywords: Arab region, challenges, smart sustainable city, e-government, ICT

1. Introduction

Computing in government can be traced back to the start of computer history (Traunmüller, 2003). However, the term e-government came to light in late 1990 (Kolachalam, 2003). E-government started as a practitioner field, basically convening practitioners struggling to meet the new challenges of the Internet medium by implementing new systems creatively. Later on, e-government went beyond services to the citizen to include organizational change and the role of government.

E-government, also known as digital government, online government or connected government, brings significant benefits to the government, citizens, businesses, employees and other non-profit organizations and political and social organizations. There are different types of e-government delivery models namely: Government-to-Citizen (G2C); Citizen-to-Government (C2G); Government-to-Business (G2B); Business-to-Government (B2G); Government-to-Employee (G2E); Government-to-Government (G2G); Government-to-Nonprofit (G2N); Nonprofit-to-Government (N2G) (Riad et al, 2010). These delivery models share activities (Shailendra et al, 2007) such as: pushing information over the Internet; Two-way communications between the agency and the citizen, a business, or another government agency; conducting transactions; Fostering transparent governance. E-government indeed enables the citizen transition from passive information access to active citizen participation by involving the citizen in the different governmental processes.