# Chapter 5 Towards a Regional Ontology for E-Participation: An Ecological View

Nixon Muganda Ochara University of Pretoria, South Africa

### **ABSTRACT**

This chapter shows the need to enhance global understanding of how the transformational government artifact is unfolding as the concept of e-Government continues to gain greater visibility in developing countries of Africa. The interest in this chapter is not to question the global commitments to the notion of transformational government but to bring to the fore inadequacies of universal conceptualization and interpretation of e-government, evidenced through the various evolutionary models and frameworks, and argue that a focus on regional ontologies is inevitable in realizing transformational government. The authors see the quest for a regional ontology as urgent, since most African governments are currently involved in e-Government initiatives as part of a broader set of governance reforms that date back to the 1980s. Therefore, the aim of the chapter is to provide a rationale for a transformational government vision for developing nations, rooted in an ecological perspective, particularly taking into account the socio-cultural context.

### INTRODUCTION

The widely held view of the meaning of e-Government revolves around the use of Information and Communication Technologies (ICTs) by the public sector with the aim of improving service delivery, encouraging citizen participation in decision making process and making governments more accountable, transparent and effective (UNESCO, 2012). E-Government initiatives are hinged on

developing stakeholders' capacities to access government information and services. Therefore from a policy perspective, the intent of various e-Government applications is to re-orient public service delivery towards e-governance. Thus in modern governments, the service orientation and e-Government are inextricably intertwined, which has been underscored by the United Nations Department of Economic and Social Affairs to imply the application of ICT within public administration

DOI: 10.4018/978-1-4666-5868-4.ch005

to optimize internal and external functions, thereby providing government, the citizen and business with a set of tools that can potentially *transform interactions*, *service delivery*, *knowledge utilization*, *policy development and implementation and meeting good governance goals*. In effect, this is a quest towards transformational government (TG), which leads us to think about e-Government maturity.

The concept of e-Government maturity is adopted from the discourses that emerge in research that present the evolutionary approaches of e-Government implementation. The e-Government evolutionary approaches regard the various stages as points of successful e-Government adoption (Layne & Lee, 2001; Chen, 2002; Moon, 2002; Davison, Wagner, & Ma, 2005; West, 2005; Andersen & Henriksen, 2006). In these evolutionary models, there is a move from e-Government deployment focusing on individual agency applications towards designing the front-end customers' experience to the integration of back-office databases and support services on a standardized infrastructure (Hodgkinson, 2002; Singh & Das, 2007). Thus successful deployments at various levels denote some form of maturity. E-Government maturity is considered as demonstrated behaviour by a country or a government agency for realizing progress towards a certain level of e-Government as opposed to readiness whose focus is on a country's potential (Singh et al., 2007). This chapter elevates the need to enhance global understanding of how the transformational government artifact is unfolding as the concept of e-Government continues to gain greater visibility in developing countries of Africa. The interest in this chapter is not to question the global commitments to the notion of transformational government, but to bring to the fore inadequacies of universal conceptualization and interpretation of e-government, evidenced through the various evolutionary models and frameworks, but rather to argue that a focus on regional ontologies as inevitable in realizing transformational government.

The ecological view adopted in this study reifies the component of external environments that have been a significant part of Information Systems research models for over three decades (Zhu & Thatcher, 2010). For instance, from an institutional perspective, Ives, Hamilton, and Davis (1980) emphasized the need to study political, legal, economic and social environments within which social entities such as transformational government are embedded. Implied in the conceptualization of social entities is the influence the external environment has on individual and organizational behaviour, which motivate action on IT - related artefacts (Davenport, 1997). IT-reliant artefacts such as e-Government can also benefit from analyses that draw on socioeconomic and political levels of analysis (Pettigrew, 1985). Therefore, the relationship between environmental factors and IT-reliant innovations could be explained from an institutional theory perspective. For instance, Oxley et al (2001) undertook a cross-country analysis in which the governmental, legal and cultural factors were analyzed as the institutional environments for e-commerce. Such studies provide ample ground to consider the use of institutional theory for studying other related IT artefacts such as e-Government in order to unearth the influence the external environment has on individual and organizational behaviour. Institutional theory is therefore a candidate theoretical lens that can be used to explain the state of e-participation, as an indicator of transformational government, at country levels. Thus we adopt the concept of information ecology, which connects ecological ideas with the evolving information ecology and is a theoretical extension of the institutional approach (Zhu & Thatcher, 2010) to focus on the socio-cultural environment as a formative construct representative of the external environment for a regional ontology for transformational government. The study is set within a broader researcher project aimed at articulating a regional ontology for transformational government in

## 11 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/towards-a-regional-ontology-for-e-participation/107165

### Related Content

### Role of Technological Innovation and Its Governance in Entrepreneurial Evolution

Rishi Kant Kumar, Adeeba Hoor, Sudhir K. Jain, Rana Singh, Kumod Kumar, Prashant Kumarand Apurva Chamaria (2024). *International Journal of Electronic Government Research (pp. 1-25)*. www.irma-international.org/article/role-of-technological-innovation-and-its-governance-in-entrepreneurial-

evolution/335069

### E-Voting: Portable Fingerprint-Based Biometric Device for Elderly and Disabled People

Siddharth Chatterjee, Ishan Sagar Jogalekarand K. Lavanya (2023). *Cyber-Physical System Solutions for Smart Cities (pp. 132-142).* 

www.irma-international.org/chapter/e-voting/328262

### World Wide Web Site Design and Use in Public Management

Carmine Scavo (2003). *Public Information Technology: Policy and Management Issues (pp. 299-330).* www.irma-international.org/chapter/world-wide-web-site-design/28216

# Analyzing the Network Readiness Index in the United States to Assess ICT Infrastructure in Handling Crises Like COVID-19

Saeed Tabar, Sushil Sharma, David Volkmanand HeeLak Lee (2021). *International Journal of Electronic Government Research (pp. 1-14)*.

www.irma-international.org/article/analyzing-the-network-readiness-index-in-the-united-states-to-assess-ict-infrastructure-in-handling-crises-like-covid-19/289353

### E-Government Portals in Mexico

Rodrigo Sandoval Almazanand J. Ramón Gil-Garcia (2008). *Electronic Government: Concepts, Methodologies, Tools, and Applications (pp. 1726-1734).* 

www.irma-international.org/chapter/government-portals-mexico/9818