

# Chapter 15

## Exploring the Development of M-Government: Case Studies of Korea and Kenya's Mobile Banking Sector

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### ABSTRACT

*The focus of this chapter is on exploring the possibilities available to African countries that wish to construct and enable m-government. The mobile banking sectors in Korea and Kenya are explored in order to find out the driving forces behind the success and failure of m-government projects. Using Actor-Network Theory (ANT), it is possible to observe how the networks come into being, which actors exist, how these actors are enrolled into a network, and how these networks achieve stability. ANT enables us to extract some elements that African countries must concentrate on if they wish to push forward with m-government initiatives and follow the example set by these two countries.*

### INTRODUCTION

Information and Communications Technology (ICT) has been a powerful driver for social and economic development in many countries. The countries with the highest incomes are now all known as knowledge economies. It is possible to observe that the knowledge economy is accompanied by the increasing importance of ICT, and that the emergence of e-government is common in high income countries (Foray & Lundvall,

1996). The UN Global E-government Readiness Report 2005 (Hafeez & Sher, 2006) indicates that “e-government includes the capacity and the willingness of the public sector to deploy ICT for improving knowledge and information in the service of the citizens.” Using ICT does not only help the public sector to enhance its efficiency and effectiveness, but the government can also increase its transparency through reciprocal interaction with its citizens. The increasing complexity of e-government processes married with the

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development of Internet enabled mobile devices has recently resulted in the idea of m-government coming to the fore.

The evolution of e-government initiatives and m-government is explored in this chapter. The focus is on the mobile banking sector in Korea and Kenya. The Korean government has successfully harnessed ICT to achieve greater efficiency and productivity in the public sector. Its efforts have been recognised internationally, with Korea consistently ranking first among countries in the world in various e-government surveys. Furthermore, the country has been promoting m-government along with its high-level of mobile technology (UN, 2012). Considering that the country has transformed itself from a developing to a developed country within only a few decades, the country's successful turn to e and m-government can serve as a powerful example to other developing countries. The case of Kenya, one of the leading countries in e-government among developing countries (UN, 2012), is also explored in this chapter. M-PESA, the mobile payment system launched in Kenya, will serve as an important reference point in the analysis here. The opportunities and challenges that these two countries, Kenya and Korea, faced in the process of pushing forward m-government initiatives will be identified and interrogated.

This chapter begins with the definition and characteristics of e-government and m-government will be examined. Then the focus will move on to the prerequisites for success. ANT, which evolved from the work of Callon (1991) and Latour (1992) and which serves as the theoretical framework of the research, will be discussed. ANT will be utilised for the analysis of the constitution of the networks consisting of the various actors in the two countries. It is notable that the both governments played a significant role in initiating and implementing a wide range of ICT programmes in the development of e-government and m-government. However, the evolution process included a wide array of actors. The chapter

will show how these actors' efficient networking and cooperation brought about the success of m-government initiatives.

The research is based on secondary sources such as articles in academic journals and books. Primary sources such as official government records, annual reports and various published documents, are also used. This enables the researcher to develop a comprehensive view of the m-payment initiatives in Korea and Kenya. Currently, there are, in many African countries, a number of m-government initiatives in the planning stage or in the process of being established. For example, Rwanda has a national programme supporting the HIV positive and the Department of Home Affairs in South Africa provides services that help citizens to track ID document application via Short Message Services (SMS) (Middleton, 2011). Through this research, it will be possible to extract some lessons from the cases of Korean and Kenyan m-government for future reference.

## **M-GOVERNMENT IN ANT**

### **Definitions and Characteristics of M-Government**

In order to explore the concept of m-government, it is important to clarify what e-government is since m-government is the extension of e-government which makes use of mobile technology as a platform (Kushchu & Kuscu, 2003). According to the World Bank (2011), "e-government refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government." M-government is defined as "use of mobile and wireless communication technology within the government administration and in its delivery of services and information to citizens and firms" (El-Kiki

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