

## Chapter 3

# Decision Support Systems: An E–Government Strategy to Enhance Human Resources Output in Public Sector Organisations

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### **ABSTRACT**

*E-Government is about using the tools and systems, made possible by Information and Communication Technologies (ICTs), such as Decision Support Systems (DSSs) as a strategy to enhance human resources output in public sector organisations. The aim is to provide better public services to citizens and the business sector. ICTs are already widely used by government bodies, especially in developed countries, just as in enterprises. In Zimbabwe, and in many other developing countries, Public Sector Organisations have already started exploiting DSS, unlike the private sector where such systems have been in use for a long time. DSSs have subsequently improved decision making processes in the private sector. Service efficiency and improved effectiveness are the expected benefits of DSSs exploitation alongside increased stakeholder value. This chapter aims to provide the grounds for building an evaluation theory or a framework for assessing DSS adoption and exploitation in the context of public sector and public services provision. It discusses the results of a study that finds that, to a greater extent, decision support systems can be used as an e-Government strategy that will in turn be highly effective in assisting decision making in Public Sector Organisations.*

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## INTRODUCTION

According to Yun and Opheim (2010), one of the most rapid innovations taking place in state governments today is the increased use of the Internet to provide services to be accessed by citizens: a practice referred to as e-Government. The two authors further cite a recent study by the PEW Research Centre in the States (2008a), which found that states are using the Internet to make it significantly easier for citizens to do business and transact on-line. They go further to cite an example that in Michigan, obtaining an air quality permit used to take from six to eighteen months, however, it now takes only a few days. In many states, a citizen is able to renew a drivers license or auto registration, pay a fine, or locate information on sex offenders or missing persons – all on-line (Yun & Opheim, 2010). The study suggests that in over 20 percent of the states the above mentioned services are provided in different foreign languages as well. States are also providing increasing opportunities for citizens and public officials to interact. This trend in public outreach and participation has made it easier for interested parties to seek information about specific issues, send comments to public officials, and even personalize communication.

While few studies show that increased Internet access improves citizens' basic trust in political institutions, digital or e-Government and through application of Decision Support Systems (DSS) does appear to improve perceptions of government processes (Tolbert & Mossberger, 2006; Larson & Rainie, 2002; Gibson, Lusoli, & Ward, 2007). All the states have made rapid progress in implementing Internet technology. For example, in 2000, 78 percent of the states did not offer on-line services; in 2007 only 14 percent of the states were without these services (West, 2007). However, implementation of digital services and outreach has taken place much more rapidly in some states (Yun & Opheim, 2010).

Yun and Opheim (2010) suggest that the term e-Government is a comprehensive one that is sometimes referred to as on-line government or Internet-based government. Dawes (2002) gives us a sense of the multidimensional nature of the term when she states that it is the *use of Internet technology to support government operations, engage citizens, and provide government services*. The first of these, government operations, primarily involves management practices that, although critical, are largely invisible to the public. Stahl's (2005, p. 4) use of the term e-government corresponds with the concept of e-service that includes those aspects of public administration that have to do with the tasks of the executive. Typically these tasks involve service delivery decision making, but they may also involve the interpretation or enforcement of laws. Public agencies employ an entrepreneurial model, that is, they strive to emulate the success of business in building efficiency and cutting costs. Governments seek to adopt approaches that are customer driven and are closely associated with the reinventing government reforms of the United States and the New Public Management reforms abroad (Tolbert & Mossberger, 2006; Ho, 2002).

According to Ngwenya et al. (2010), e-Government is about using the tools and systems made possible by Information and Communication Technology (ICTs) to provide better public services to citizens and business. ICTs are already widely used by government bodies, just as in enterprises, but e-Government involves much more than just the tools. Effective e-Government also involves rethinking organizations and processes, and changing behaviour so that public services are delivered more efficiently to the people who need to use them. Implemented well, e-Government enables all citizens, enterprises and organizations to carry out their business with government agencies more easily, more quickly and at lower cost (Reding, 2006). According to Reding (2006), *we are starting to see benefits from e-Government...but we need*

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