

Chapter 9

Information Technology Needs for Public Service Delivery in the Digital Era

ABSTRACT

This chapter continues the path through the ISSP framework by considering the IT needs of government entities. The chapter discusses the evolution of eGovernment and mGovernment and presents research findings regarding the website evaluation of 40 countries using the Inland Revenue and Social Security governmental websites as the research basis. The website evaluation utilized an instrument developed by Cumbrowski that consists of eight dimensions. The research also examined the relationship between these website ratings and other variables extracted from reports provided by the International Telecommunication Union, World Economic Forum, and United Nations Development Programme. The chapter also examines the trends that are at the forefront of IT developments. The chapter concludes by applying various models to show how a government entity may determine its IT needs. The above are discussed in the context of how to improve public service delivery in the digital era, with numerous examples to support this discussion.

INTRODUCTION

The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn't think they could learn before, and so in a sense it is all about potential. Steve Ballmer, CEO Microsoft (January 2000 to February 2014)

The logical framework for determining the ICT requirements of an organisation was presented in Chapter Five (refer to Chapter 5, Figure 1) and has been the focus of the two previous chapters (information needs and IS requirements). This chapter continues to address the contents of the logical framework with the focus on the IT needs of the organisation. The conceptual basis regarding the logical framework

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for determining the ICT requirements of the organisation is based on the information requirements of the organisation to run its activities now and in the foreseeable future. Everything else flows from this basis and addresses two other fundamental questions: What IS applications are required to support the organisation's information needs and what IT equipment and supporting tools and mechanisms are required to support the IS applications required by the organisation? Hence, this chapter will address the IT requirements of the organisation to support the identified IS applications needed by the organisation.

The subject matter covered by this chapter is intricate due to the diversity of the IT equipment and the associated supporting tools and mechanisms, particularly their dynamism and the velocity of their development. One should note that the IT equipment, including the software that drives them and the computer software associated with information network communications are fundamental. IT covers such a broad spectrum that it is practically impossible to cover the topic fully. However, this chapter will discuss various key and critical aspects and will provide a mechanism for determining the organisation's IT needs.

Amongst the various topics that are discussed in this chapter are concepts, such as eGovernment, mGovernment and eGovernance. An important aspect of this chapter is related to the research findings conducted by the author related to various assessment design dimensions of an extensive worldwide sample of governmental websites that cover forty countries and specifically addresses the Inland Revenue and Social Services functional areas that are common functions applicable to the sample countries. Moreover, this chapter will also discuss the IT trends that are likely to impact the way government and private business transactions are to be conducted between them. However, the ultimate objective of the chapter is to provide a methodology for determining the IT needs of the organisation.

BACKGROUND

The information technology leap of the 1980's opened the way for the "reinventing government" concept. Osborne and Gaebler (1992) visualized a paradigm shift in the way government interacts with its customers. They argued that governments needed to reorient the focus of their operations from one that is an inward-looking style to an outward-looking attitude by accentuating the concerns and needs of end users. They proposed a model whereby: (a) citizens are regarded as "customers" who become the central focus in designing government service delivery; (b) governments embrace the principles of "catalytic government" and "community-ownership"; and (c) public officers are encouraged to seek ways to empower citizens to take ownership of community concerns by collaborating with citizens groups and non-profit organisations to identify solutions and deliver public services effectively.

Before the widespread use of the internet, the IS applications and eGovernment services were mostly applied for increasing the operating efficiency of the Departments and enhance internal productivity and communications. Hence, the focus at that stage was mainly internal and managerial improvements with the basic aim of doing things faster at a much lower cost. The advances in IT and other related IT equipment permitted this to take place.

However, the extensive growth of eCommerce in the private sector compelled governments to provide a similar service due to the increased expectations from the private sector, including the citizen. Thus, there was a shift in government administration mentality, from the production oriented application of IT and IS for cost reduction to a customer oriented environment. Hence, the internet shifted the government's attention to expanding its external relationship with its customer base. The internet has

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