Chapter 11 Defining the Information Systems Strategic Plan for Public Service Delivery in the Digital Era

ABSTRACT

Chapter 11 is the final chapter within Section 2 and specifically addresses the issue of defining and formulating the information systems strategic plan (ISSP) for public service delivery in the digital era. This chapter commences by discussing the key objectives of an ISSP and through this discussion links the lessons learnt through the research findings from Chapter 3. The chapter also examines the IS and IT strategic planning process and identifies the inputs for defining the ISSP. Basically, this chapter links the findings from the previous chapters to the ISSP input mechanism. Once this is completed, the chapter provides a step-by-step description for defining and formulating the ISSP document that is supported by examples.

INTRODUCTION

Strategy without tactics is the slowest route to victory; tactics without strategy is the noise before defeat.
- Sun Tsu, Ancient Chinese Military Strategist

The previous five chapters have explored the logical framework for determining the ICT requirements of the organisation described at Chapter 5 and depicted at Figure 1. Hence, these five chapters are viewed as providing the necessary analytical inputs for defining and formulating the information systems strategic plan (ISSP) of an organisation. Throughout the previous chapters it has been shown that Information and Communications Technology (ICT) has played a major role in private and public sector organizations to improve the efficiency, effectiveness and quality of their services. Defining and formulating the ISSP

DOI: 10.4018/978-1-5225-9647-9.ch011

for Public Service delivery in the digital era has become a critical task. Traditionally, many government organisations have tended to utilise ICT in a piecemeal fashion, with varying levels of success.

However, in the past few decades the ISSP process has been refined and many governments are keen to incorporate an integrated Information Systems strategy to achieve business and service excellence. This is the fundamental reason why defining an ISSP is essential for government entities to improve and enhance Public Service delivery in the digital era. This chapter brings together the knowledge and tools that were addressed in the five previous chapters through the various analytical tools and models.

Table 1 provides a summary of the analytical tools and models utilised for the various objectives, related to undertaking the organizational strategic review; determining the organizational information needs; defining the organizational IS requirements to support the information needs; and ascertaining the organizational IT needs to support the IS requirements. Together these provide the necessary information for the formulation of the ISSP. Table 1 also provides the specific research reference source for each of analytical tools and models utilised in defining the ISSP so that the reader may explore further the various techniques that are described and illustrated. Furthermore, these references provide an academic foundation for the ISSP definition framework, thus ensuring that the resultant ISSP outcome is based upon a robust and well tested knowledge base.

Table 1. Summary of Knowledge and Analytical Tools from Previous Chapters

Objective	Analytical Tool or Model	Reference
a. Organisational strategic review:		
• I.S strategic review	McFarlan's I.S Strategic Grid	McFarlan et al. (1983)
Data usage strategic review	Marchand's Areas of Information Use	Marchand et al. (2000)
Customer persona review	Customer Persona Profiles	Lidwell et al. (2010)
b. Organisational information needs:	Anthony's Triangle	Anthony (1988)
	Marchand's Value of Information	Marchand et al. (2000)
c. Organisation I.S needs:	Porter's Value Chain	Porter (1985)
d. Organisation I.T needs:	Michael Porter's Five Forces	Porter (1985)
e. I.C.T implementation Issues:		
Critical success factors	Critical Success Factors Analysis	Caralli et al. (2004)
• Implementation philosophy	Systems Development Options	Refer to Chapter text
	Selecting Application Systems	Refer to Chapter text
Strategic Justification	SWOT analysis	See Chapter example
Traditional Justification	Sensitivity analysis	See Chapter example
	Cost-benefit analysis	See Chapter example
• ICT Requirements Planning	Strategic Management Issues	Refer to Chapter text
	I.S Success Model	DeLone et al. (2003)
	Systems Development Methodology	Waterfall Model
	Model for Project Success	Camilleri (2011)

a, b, c, d, e refer to Chapters 6, 7, 8, 9 and 10 respectively.

12 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/defining-the-information-systems-strategic-planfor-public-service-delivery-in-the-digital-era/233411

Related Content

Selecting a Database Partitioning Technique

Le Gruenwaldand Margaret H. Eich (1993). *Journal of Database Management (pp. 27-39)*. www.irma-international.org/article/selecting-database-partitioning-technique/51123

Distinguishing Personality Recognition and Quantification of Emotional Features Based on Users' Information Behavior in Social Media

Chunnian Liu, Qi Tianand Mengqiu Chen (2021). *Journal of Database Management (pp. 76-91).*https://www.irma-international.org/article/distinguishing-personality-recognition-and-quantification-of-emotional-features-based-on-users-information-behavior-in-social-media/273618

Data Warehouse Design to Support Customer Relationship Management Analyses

Colleen Cunningham, II-Yeol Songand Peter P. Chen (2009). Database Technologies: Concepts, Methodologies, Tools, and Applications (pp. 702-724).

 $\underline{www.irma-international.org/chapter/data-warehouse-design-support-customer/7939}$

Measuring Data Quality in Context

G. Shankaranarayananand Adir Even (2009). *Handbook of Research on Innovations in Database Technologies and Applications: Current and Future Trends (pp. 385-395).*www.irma-international.org/chapter/measuring-data-quality-context/20723

Convolutional Recurrent Neural Networks for Text Classification

Shengfei Lyuand Jiaqi Liu (2021). *Journal of Database Management (pp. 65-82)*. www.irma-international.org/article/convolutional-recurrent-neural-networks-for-text-classification/289794