Chapter 2
Soft Systems Methodology in IT-Related Organizational Change

ABSTRACT

Any organization needs information technologies (IT) to attain efficient process and make effective decisions. The main discussion of this study is focused on IT as a reason of change in an organization. Besides providing a definition for information systems (IS), this chapter aims at explaining soft systems methodology (SSM) as an IS development methodology. Considering seven elements of philosophy, model, techniques and tools, scope, output, practice, and product, it clarified the SSM position in other methodologies. In this concern, it revealed the main concern of using SSM in the development of information systems (i.e., meeting the real needs of the organization through generating meaningful information based on the available data) as represented in five case studies of SSM in IT-related organizational change.

INTRODUCTION

Organizations are increasingly applying strategies to enhance their capabilities to survive in the global competitive market. In this context, they improve the decision making process through advancing their agility level, performing efficiently and effectively to meet the successive fluctuations of the market. Achieving this important goal, many modern organizations, either mid or

large sized, made attempts to invest and adopt new management information systems components (Jalal Karim, 2011).

Information systems development is a long and complex process involving various elements from the beginning to the end. System development projects require widely financial, technical and human resources, and are implemented using various techniques and tools. Therefore, using specific and appropriate methodology will guarantee planning and successfully managing such projects. A development methodology is mainly used to have control over the development process. The selection of this methodology is largely led by the IS professionals (Gasson, 1995).

Interests in the use of soft systems methodology (SSM) in working with computer-based information systems (IS) have been growing in recent years. Playing an important role in the development of information systems, SSM also differs from other technical approaches. Due to its nature, it is widely used in 'information management', 'information strategy' and 'business analyses'. It focuses on 'social', 'cultural' and 'political' factors (Memon, 2011).

This chapter is focused on information technologies/ information systems (IT/IS) as one of the causes for the organizational change. Such change requires a large amount of work prior to design since it must be self-motivated. Besides, institutionalization and incorporation of a system to its organizational context is hard to apply; otherwise, the system will continue working when the designer/consultant leaves the scene. It is also difficult to put the goals in use and determine the criteria for achieving success. This study provides a definition for IS and focuses on system development methodologies and clarifies the position of SSM in other methodologies regarding a framework described by Avison and Fitzgerald (2006), which includes seven elements.

In the end, five relevant case studies are reviewed. The first one is the work by Lockett et al. (2006). They used SSM to develop an implementation process for the installation of the applications of customer relationship management (CRM) in small to medium-sized enterprises (SMEs) in the UK mail order sector. The next one is the study by Williams (2000) who provided an analysis of the flow of communication and the use of information technology in ABC & Co through SSM. Md Saad et al. (2012) worked on four case studies conducted within Malaysian Public Institution of Higher Education (PIHE) context to discuss about the application of SSM as a basis for formulating knowledge management system (KMS) strategy. The fourth case study was conducted by Bhattacharjya et al. (2006) to investigate what effect SSM has

21 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/soft-systems-methodology-in-it-related-organizational-change/259193

Related Content

Strategic Programs: Planning and Execution
(2013). *Knowledge Driven Service Innovation and Management: IT Strategies for Business Alignment and Value Creation (pp. 255-280).*
www.irma-international.org/chapter/strategic-programs-planning-execution/72479

Detecting Community Structures Within Complex Networks Using a Discrete Unconscious Search Algorithm
Ehsan Ardjmand, William A. Young IIand Najat E. Almasarwah (2021). *International Journal of Operations Research and Information Systems (pp. 15-32).*
www.irma-international.org/article/detecting-community-structures-within-complex-networks-using-a-discrete-unconscious-search-algorithm/275788

Systematic Literature Review on Global Strategy: Mapping Trends and Gaps
Nelson deMatos, Miguel Ángel Sánchez Jiménez, Célia M. Q. Ramos, Nuno Baptistaand João José de Matos Ferreira (2020). *Dynamic Strategic Thinking for Improved Competitiveness and Performance (pp. 243-270).*
www.irma-international.org/chapter/systematic-literature-review-on-global-strategy/257867

Particle Swarm Optimization for Punjabi Text Summarization
Arti Jain, Divakar Yadavand Anuja Arora (2021). *International Journal of Operations Research and Information Systems (pp. 1-17).*
www.irma-international.org/article/particle-swarm-optimization-for-punjabi-text-summarization/275001

Sources of Agricultural Productivity Differences between Israel, Jordan, Lebanon and Syria using DEA
Emile J. Salame (2014). *International Journal of Productivity Management and Assessment Technologies (pp. 47-61).*
www.irma-international.org/article/sources-of-agricultural-productivity-differences-between-israel-jordan-lebanon-and-syria-using-dea/122394