

Chapter 21

Towards A Contingency Model for Assessing Strategic Information Systems Planning Success in Medium Enterprises

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ABSTRACT

Strategic planning of information systems is vital in the business environment and this is still an open issue in the management information systems research. Through planning, organisations develop effective long-term use of information systems and subsequently ensuring the support of organisational objectives. This chapter develops a contingency model for measuring the success of strategic information systems planning in the context of medium enterprises. The contingency theory, as an analytical lens, advocates that organisational success can be achieved by matching organisational characteristics to the contextual factors. Drawing from this notion, this chapter postulates that the strategic information systems planning process, as a phase, may lead to successful planning. This relationship is moderated by contingency variables characterised by the presence of environmental uncertainty, organisational structure, government and policies, business strategy orientation and information systems maturity. This chapter studies the moderating role of contingency variables and identifies the influential factors and their effect.

1. INTRODUCTION

Information systems use in medium enterprises tends to primarily be for administrative and operational tasks. The most frequent applications in medium enterprises are transactional in nature. Beckinsale, Ram and Theodorakopoulos (2011) have recently stated that the failure to plan the introduction and exploitation of information systems and technologies in medium enterprises is due to the top management limitations. These include management having insufficient time to spend on future business developments and

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management teams having little experience, expertise or interest in exploiting technology. The age and experience of the owner is often the most influential factor in relation to decisions on IS-based success.

Prior information systems researchers have stated that strategic information systems planning in medium enterprises becomes more critical as technology becomes more central to the medium enterprises' products and processes, and planning needs to be integrated with business strategy. The main problem associated with the lack of strategic information systems use in medium enterprises relates to the relatively poor fit between the offering of information systems and the business need (Levy & Powell, 2005). The increasing demands of the marketplace make it very essential for enterprises to make successful strategic information systems planning (SISP) based on an alignment between information system strategies and the business strategic plan of the organisation. However, the existing literature provides little evidence of information systems (IS) development within medium enterprises. Foong (1999) stated that the introduction of IS into enterprises, like the early introduction into large firms, has tended to be fragmented and based around operational support and transaction processing. Typically, the interest and the enthusiasm of owners tend to drive IS adoption (Premkumar & Roberts, 1999). Not surprisingly, adoption is often not planned strategically. For example, manufacturing businesses invest in systems in order to improve production processing without integrating the order processing system or developing stock control systems (Levy & Powell, 1998).

According to Levy and Powell (2000) high environmental uncertainty is also likely to drive enterprises to change business processes. This chapter argues that paying more attention to SISP may, therefore, increase survival rates of enterprises - supporting the contention that SISP is vital for gaining and maintaining competitive advantage (Agarwal, 1998) – accordingly reducing the environmental uncertainty that challenges managers.

The purpose of this chapter is to develop and validate a contingency model for assessing strategic information systems planning success in the context of a developing country medium enterprise. Strategic Information Systems Planning (SISP) is considered as the first stage in the process of information systems implementation. Strategic Information Systems Planning (SISP) has been defined in several ways. Mohdzain and Ward (2007) perceived Strategic Information Systems Planning (SISP) as activities directed towards recognising organisational opportunities for using information technology, determining the resource requirements to exploit these opportunities, and developing strategies and action plans for realising these opportunities and meeting the resource needs. Teubner (2007), considered Strategic Information Systems Planning (SISP) as an exercise or ongoing activity that enables an organisation to develop priorities for information system (IS) development.

In the context of this chapter, Strategic Information Systems Planning (SISP) is described as a medium or long-term managerial process which identifies an organisation's priorities for developing information systems and information technology, in order to align information systems strategy with business strategy so as to gain competitive advantage (Bechor *et al.*, 2010; Mohdzain and Ward; Teubner, 2007; Zijad, 2007; Newkirk & Lederer, 2006). Many studies (e.g., Hovelja, Rozanec and Rupnik, 2010; Mohdzain & Ward, 2007; Palanisamy, 2005) have been conducted on the topic of success of information systems implementation but there is no consensus about what the appropriate method should be for examining the success of Strategic Information Systems Planning (SISP).

It is inferred, from literature, that the success of Strategic Information Systems Planning (SISP) is difficult to measure and cannot be limited to simple financial aspects such as return on investment (Segars & Grover, 2005). Strategic Information Systems Planning success (SISPS) has been described

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