EXAMINING THE STRATEGIC BENEFITS OF INFORMATION SYSTEMS: A GLOBAL CASE STUDY

Abdullah Basahel, Researcher, Brunel Business School, Brunel University, UK,
Abdullah.basahel@brunel.ac.uk
Zahir Irani, Information Systems Evaluation and Integration Group (ISEing), Brunel Business School, Brunel University, UK,
Zahir.Irani@Brunel.ac.uk

Abstract
In the context of the emerging evaluation of Information Systems (IS) as strategic enablers, this paper critically reviews the literature relating to the strategic benefits of IS. Understanding the importance of IS benefits can be significant in the development of strategy in an organisation, although most organisations have diverse environments and, likewise, diverse benefits for decision-makers. Thus, taxonomies of the benefits of IS are produced from both the academic literature and published case studies. In this way, a classification of benefits as they relate to organisational strategic focus has been developed to provide a greater understanding of the benefits needed to obtain a specific focus. The result of this paper is a taxonomy of IS benefits in the strategic focus of IS, using Y bank as a case study. This categorisation can support the evaluation of IS processes, which will, in turn, support decision-makers throughout the planning process.

***KEYWORDS**: Information systems, strategic IS, benefits, global IS, case study.*

1 INTRODUCTION

Many researchers have suggested IS as part of the strategy of firms, in accordance with IS roles (Henderson and Venkatraman, 1999; Morgan, 2002; Premkumar et al., 1992), which include administrative, operational, and competitive roles. The scope of IS automation of accounting and control functions covers the administrative role. This role requires the deployment of an efficient IS platform for administration and control of the strategic management of an organisation. The operational role creates and deploys technology within the organisation, which in turn helps to achieve the capability of automating business processes in administrative activities. The deployment of an information technology (IT) infrastructure is a requirement of this role and aids in selecting a business strategy (Henderson and Venkatraman, 1999; Laumann et al., 2009; Morgan, 2002). Meanwhile, the competitive role focuses on efficiency by increasing IS attributes' capabilities of achieving new sources of competitive advantage in the market by deploying new IS applications. This role has a significant impact on organisational transformation (Henderson and Venkatraman, 1999; Luftman and Brier, 1999; Prahalad et al., 2002) and supports an organisation's ability to increase its IS capability.

IS strategic planning dimensions can be categorised in different ways in terms of IS-business integration. Papp (1999) has suggested that most alignment models are comprised of two dimensions, namely 'fit', which considers both the external and internal environments of an organisation, and 'linkage', which is the business-IS alignment. Furthermore, strategic information systems planning (SISP) effectiveness is made up of five dimensions, including alignment, analysis, cooperation, improvement of capabilities, and contribution. However, these dimensions of SISP effectiveness are in turn influenced by six process dimensions of SISP, that is to say, by comprehensiveness, formalisation, focus, flow, participation, and consistency. A three-stage model can be used to evaluate these dimensions and their effectiveness. This model contains three stages: preliminary, evolving, and mature. It has been argued that a balance should exist between rationality and adaptability to permit the process to be effective in managing the organisation in the short term while simultaneously creating future technology and markets (Grover et al., 2005; Segars et al., 1999). All of these roles and dimensions of IS support planners or decision-makers in understanding the application of IS within the organisation and in identifying IS benefits. With this in mind, this work considers the adaptability of applying strategic benefits of IS in IS strategic planning to develop a taxonomy for evaluation and understanding of these benefits. This taxonomy may also be used as a tool to support the planning team throughout the IS planning process.

2 STRATEGIC BENEFITS OF IS PLANNING

The benefits level matrix, compiled by Silk (1991), can be used to demonstrate the benefits of IS strategic planning. This matrix indicates the importance of executive skills and commitment, which play a crucial role in IS strategic planning. It is estimated that once the IS plan is delivered, approximately four to five years are required before any benefits of the formalized planning process are gained.. Obtaining real business benefits requires learning how to plan effectively and strategically within an organisation and how to align the IS plan with the business plan (Clarke, 2006; Robson, 1997). Studies have also shown that the relationship between executive officer and information officer is an important factor in the success of the IS planning process (Lee and Bai, 2003; Tai et al., 2000).

IS-business integration supports the coordination of work associated with different parts of the organisation, and measuring integration helps bring the current level of integration to light. Many studies have applied different models to examine this issue. One of these is the framework of critical success factors (CSFs) by Mendoza et al. (2006).

Managing information resources is an efficient and effective way to express the underpinning of integration of IS activities in an organisation (Cunha and Figueiredo, 2000; Earl, 1996). The IS strategy must align with the overall business strategy in such a way that IS activity and other activities work to obtain the same targets by using their competencies. Thus, the main task of the IS strategy is to create information system applications that fit the goals and priorities of the firm (Dhillon, 2005; Turban et al., 2005).

Another factor in IS strategic planning is innovation. Innovation refers to the extraction value from IS in business practices (Carr, 2003; Cash et al., 2008; Power, 2006; Silvius, 2008). The adoption of new technologies is directly related to the adoption of innovation (Burgelman et al., 2008; Power, 2006;).

IS strategic integration results in a number of benefits, including the creation of standards, cost reduction, the increase in employee productivity, support for collaboration, information sharing, customer service, and satisfaction (Shore, 2006). Similarly, using global IS involves various benefits (Deresky, 2008; Turban et al., 2005), including the following:

- Determining an acceptable cost for effective communication;
- Overcoming the challenges of distance, time, language, and culture; and
- Using the databases of business partners and supporting project collaboration among different users and locations.

Coordination is also an extremely important factor in globalisation. Such issues as simultaneous achievement on a global scale, responsiveness to markets and governments, and the worldwide transfer of learning and innovation are important to global organisations. In these organisations, each geographical unit has a specific role in the business. Bartlett and Ghoshal present a transnational organisation showing an integrated network with intensive and complex interactions among independent, physically remote units; however, even this organisation is both centralised and decentralised. The broad range of IS applications makes for an important reason to be involved in global competitive business strategy, as IS supports collaborative information sharing, problem solving, cooperative support, resource sharing, and collective action and implementation (Applegate et al., 2008; Earl, 1996; Mohdzain et al., 2007; Ward and Peppard, 2002).

Global efficiency, local responsiveness, and transfer of learning are important issues to consider in global operations. Global efficiency refers to the coordination and integration of firm activities so as to reach appropriate economies of scale. On this point, a key issue involves collecting comparative performance information from various locations worldwide to assist in decision-making regarding resource allocation. A global data network is one possible solution to managing data more efficiently. Such a data network can be built according to organisation requirements as communication functions or as standard application systems used to ease transfer of activities and people or to develop common systems to achieve economies of scale (Bleistein et al., 2005; Earl, 1996; Waema et al., 1990; Weill & Ross, 2004).

Standards of data used in communication aiding local responsiveness depend on a variety of product delivery requirements in accordance with local, legal, or market conditions. This needs to be planned and developed on a global level (Benson et al., 2004; Earl, 1996; Shore, 2006).

The transfer of learning is a crucial requirement of successful coordination. This activity entails various dimensions, including research and development and marketing and services. Communication networks support this knowledge transfer between professionals through such technologies as electronic mail and video conferencing, which encourage informal dialogue, thereby encouraging the transfer of acquired knowledge across different locations and situations (Earl, 1996; Mendoza et al., 2006; Mutch, 2008).

External alliances between organisations in which different skills and cultures abound are an important contribution of IS. Inter-organisational information systems, like value-adding partnerships between manufacturers, retailers, and global information partnerships, can demonstrate the applicability of such external alliances (Dhillon, 2005; Evans et al., 1999; Hunter et al., 2006; Saglietto, 2009).

Tangible IS benefits include inventory reduction, personnel reduction, and productivity improvement, whereas intangible benefits include information visibility, new or improved processes, and standardisation benefits for systems integration (Turban et al., 2005). IS benefits have been classified as strategic, tactical, as well as operational in financial, non-financial, tangible, and intangible measurements. Superior growth and success, leadership in new technology, improved market share, market leadership, and enhanced competitive advantage are examples of the strategic benefits of IS (Irani, 2002). Table 1 presents a classification of the benefits of IS strategic planning. The various delivery requirements may call for different approaches and methods to help make them international and allow for service provider applications (Hackney et al., 1999; Jack et al., 2006); however, the classification of IS strategic benefits considers alignment and competitiveness as well as strategic analysis. Thus, a strategic analysis focus supports organisations' understanding or the contribution of IS to core business processes, and the company's mission and vision. On the other hand, as previously mentioned, both alignment and competitiveness can justify IS goals.

Focus	Strategic Benefit	Reference
Strategic Analysis	Support decision-making process	Laudon & Laudon (2004); Robson (1997)
	Increase organisational efficiency	Benson et al. (2004); Cunha and Figueiredo (2000); Earl (1996); Weill & Ross (2004); Ward & Peppard (2002)
	Improve open culture of organisation	Hunter et al. (2006); Irani et al. (2005); Ward & Peppard (2002)
	Enable users	Laudon & Laudon (2004); Robson (1997)
	Increase productivity of employees	Shore (2006); Turban et al. (2005)
	Support coordination of work	Earl (1996); Mendoza et al. (2006); Weill & Ross (2004)
	Reduce costs	Apte et al. (1990); Benson et al. (2004); Shore (2006); Pearlson et al. (2000); Ward & Peppard (2002)
	Interface and support different organisational levels	Dhillon (2005); Laudon & Laudon (2004); Turban et al. (2005)
	Improve growth and success	Benson et al. (2004); Irani (2002); Ward & Peppard (2002)
	Create new strategic opportunities	Benson et al. (2004); Earl (1996); Robson (1997); Ward & Peppard (2002)
	Increase quality	Benson et al. (2004); Irani et al. (2005); Shore (2006)
	Offer new strategic options	Irani et al. (2005)
	Support reactions to change	Irani et al. (2005); Levy et al. (2000); Laudon & Laudon (2004)
	Support organisational teamwork	Benson et al. (2004); Irani et al. (2005); Laudon and Laudon (2004)
	Increase organisational effectiveness	Cunha & Figueiredo (2000); Earl (1996)
	Support collaboration and sharing of information	Shore (2006); Weill & Ross (2004); Ward & Peppard (2002)
Competitiveness	Develop/produce new market	Laudon & Laudon (2004); Pearlson et al. (2000); Robson (1997)
	Develop/produce new product/services	Benson et al. (2004); Pearlson et al. (2000); Robson (1997); Weill & Ross (2004)
	Obtain competitive advantage	Applegate et al. (2008); Robson (1997); Ward & Peppard (2002)
	Increase organisational competitiveness	Laudon & Laudon (2004); Turban et al. (2005); Ward & Peppard (2002)
	Display market leadership	Irani (2002); Weill & Ross (2004)
	Support innovation	Benson et al. (2004); Burgelman et al. (2008); Carr (2003); Power (2006); Weill & Ross (2004); Ward & Peppard (2002)
	Increase customer service and satisfaction	Ward & Peppard (2002); Weill & Ross (2004)
	Become a leader in new technology	Irani (2002)
	Improve relationships with customers	Laudon et al. (2004); Turban et al. (2005); Ward & Peppard (2002); Weill & Ross (2004)
	Enhance competitive advantage	Irani (2002); Laudon & Laudon (2004); Ward & Peppard (2002)
	Improve market share	Irani (2002); Laudon & Laudon (2004)
	Become responsible locally (markets, government)	Earl (1996); Weill & Ross (2004)
Aligning	Integrate IS strategic plan into business strategic plan	Benson et al. (2004); Galliers & Leidner, (2003); Robson (1997); Ward & Peppard (2002)
	Improve relationships with suppliers	Laudon & Laudon (2004); Pearlson et al. (2000); Ward & Peppard (2002)
	Improve resource control	Levy et al. (2000); Robson (1997)
	Integrate or become independent of IS function	Hinton (2005); Turban et al. (2005);
	Improve global efficiency	Earl (1996); Mohdzain et al. (2007)
	Support global organisation	Galliers & Leidner (2003); Mohdzain et al. (2007); Shore (2006)
	Attain global alliance	Earl (1996); Mohdzain et al. (2007); Saglietto (2009)
	Improve resource creativity	Robson (1997)
	Improve resource flexibility	Robson (1997); Weill & Ross (2004)
	Improve resource learning	Robson (1997)
	Create standards	Benson et al. (2004); Shore (2006); Turban et al. (2005)
	Improve knowledge	Galliers & Leidner (2003); Mutch, (2008); Robson (1997)
	Compose by integrating smaller systems	Turban et al. (2005)
	Support learning transfer	Earl (1996)

Table 1. Classification of the benefits of IS strategic planning

Irani (2002) suggests two types of IS costs, namely direct and indirect costs. The indirect costs of a project are usually thought to be of greater significance and can be described as organisational and human dimensions. They are supported in identification and analysis but nevertheless still difficult to control (Ezingeard et al., 1998; Irani, 2002) After considering the normative literature on IS strategic planning, certain published case studies identifying and validating the benefits of IS strategic planning were analysed. Table 2 lists the benefits of IS strategic planning evidenced in these published case studies.

Strategic Benefit	Case Studies					
	Skandia Re-insurance	Insurance Company	Adidas	General Motors (GM)	Piper Jaffray Companies	International Chemical
Develop/produce new product/service	✓		✓			✓
Develop/produce new market	✓		✓	✓		✓
Support decision-making process	✓	✓	✓	✓	✓	✓
Obtain competitive advantage	✓				✓	
Increase organisation efficiency		✓	✓	✓	✓	✓
Increase organisation effectiveness		✓	✓	✓	✓	✓
Increase organisation competitiveness	✓		✓	✓	✓	✓
Integrate IS–business strategic plan		✓	✓	✓		✓
Enable users		✓	✓	✓	✓	✓
Improve relationships with customers	✓	✓	✓			✓
Improve relationships with suppliers			✓	✓		✓
Compose by integrating smaller systems						
Integrate or become independent of IS function		✓		✓		✓
Interface with and support different organisational levels		✓	✓	✓	✓	✓
Support coordination of work		✓	✓			✓
Support innovation				✓		✓
Create standards	✓		✓	✓	✓	✓
Reduce costs		✓	✓	✓		✓
Increase employee productivity			✓	✓		✓
Support collaboration and sharing of information		✓	✓		✓	✓
Increase customer service and satisfaction	✓		✓			✓
Improve growth and success			✓	✓		✓
Lead in new technology					✓	
Display market leadership	✓			✓	✓	
Enhance competitive advantage	✓			✓	✓	
Improve market share	✓		✓	✓	✓	✓
Create new strategic opportunities			✓			✓
Increase quality						✓
Support global organisation	✓		✓	✓		✓
Offer new strategic options						✓
Support reactions to changes			✓			
Support organisational teamwork		✓	✓	✓	✓	✓
Improve open culture of organisation		✓	✓	✓		✓
Improve resource control			✓			✓
Improve resource creativity						✓
Improve resource flexibility			✓	✓	✓	✓
Improve resource learning		✓		✓		✓
Improve knowledge	✓			✓		✓
Attain global efficiency			✓	✓		✓
Increase local responsiveness (markets, government)	✓				✓	✓
Create global alliance				✓		✓
Support learning transfer						✓

Table 2. A classification of IS strategic planning benefits reflected in various case studies

3 RESEARCH METHODOLOGY

The benefit of IS strategic planning is a strategic issue and thus relates to business strategy, which must incorporate a number of dimensions, including strategic analysis, competitiveness, and aligning. The results of positive IS planning require justification in terms of IS strategic benefits. Thus, a need to understand these benefits by asking "how" and "why" questions exists, while asking "what" questions can be used to understand the dimensions that may affect such justification. In light of the importance of asking such question, a case study strategy is employed. Case studies suggest that business and management research should arise from both theoretical and practical issues. They distinguish between basic research (a more scientific approach) and applied research (a more practical approach in purpose and context) (Saunders et al., 2007). Within the IS community, the case study strategy has been demonstrated as a valid research strategy (Klein & Myers, 1999). As Chan et al. (1992) note, "to obtain a rich and detailed understanding of strategy from multiple viewpoints, consider the case studies or historical approaches" (p. 194). Nevertheless, case studies have been valued for the extensive examination of particular phenomena within a natural set of conditions carried out by means of multiple methods, such as interviews, observations, written materials, and data collection from different entities to gather the information required (Irani et al., 1999; Walsham, 1995b; Yin, 2008). Here, we use a single case to examine IS strategic planning. Y bank was chosen for this case study because its IS is comprehensive in implementation and important for survival. The objective of this study is to investigate the justification for IS strategic planning benefits through interviews with high-level managers and IT managers. The case study strategy was selected because it is more practical for business and management research. It engages in the empirical investigation of a specific phenomenon in a real-life environment, in addition to multi-source methods of data collection. The strategy also helps achieve a greater understanding of the research context and process and answers 'why', 'what', and 'how' questions due to its capability of using multiple methods, including interviews, documents, and observation, to collect data. Figure 1 illustrates the process of developing a research methodology based on case studies.

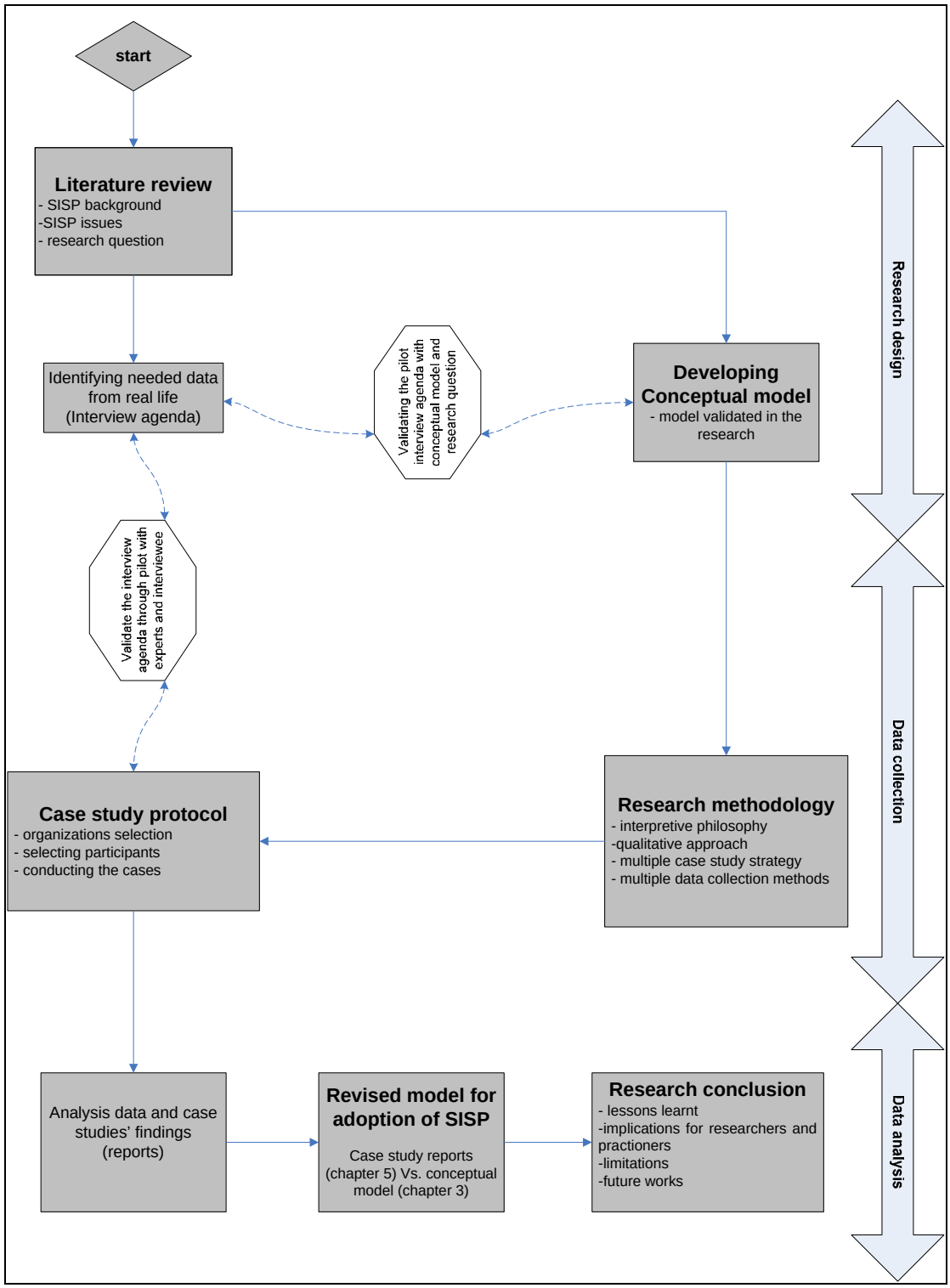

Figure 1. The process of developing a research methodology

3.1 DATA COLLECTION

This section describes multiple data collection methods used in conducting case studies. The notion of applying different methods of data collection is supported by valid and reliable case findings and reports (Bryman et al., 2007; Irani et al., 2008; Yin, 2008;). In a case study strategy, many sources of evidence can be used (Yin 2008). Such sources include documentation, archival records, interviews, observation, and physical artifacts. Six interviews made up the main source of evidence used in the current study. The interviewees involved the director of strategic planning (DSP), the director of IT (CIO), the advisor to the president (AP), internal consultancy (ICON), and the deputy director of strategic planning (DDP). The sixth interviewee supported and coordinated the connection between the interviewer and the interviewees and collected various IT strategic documents. The interviews were conducted systematically. Each interview began with questions about IS activity so as to form an understanding of the activities available in IS and how they worked. All of the interviews were structured to best understand the situation while also giving the interviewees sufficient direction to ensure that they would provide as much information as possible. All of the interviews were recorded and transcribed for clarity and were then sent to the interviewees for review of validity. The maximum time for the interviews was 1 hour and 30 minutes. All of the data from the interviews and documents were linked together.

4 CASE STUDY ANALYSIS AND DISCUSSION

Interviewees were asked to verify the IS benefits derived from implementing IS planning processes for bank Y. The CIO stated:

> *This is part of the IT process. I'm trying to give you examples of the outside strategic planning. The IT is part of the strategic planning.*

A summary of bank Y management views on the benefits of IS is presented in Table 3. These benefits were classified as strategic analysis, competitiveness, and integration. Because there are three levels of participation in describing the benefits of IS within Y, the author has used the Miles and Huberman (1994) scales for its similarities as fully participant (●), partly participant (❍) and non participant (○).

Strategy focus	Strategic Benefit	CIO	DDP
Strategic Analysis	Support decision-making process	●	●
	Increase organisational efficiency	●	○
	Improve open culture of organisation	●	●
	Enable users	●	●
	Increase employee productivity	●	●
	Support coordination of work	●	●
	Reduce costs	●	○
	Interface and support different organisational levels	●	●
	Improve growth and success	●	●
	Create new strategic opportunities	●	●
	Increase quality	●	●
	Offer new strategic options	●	●
	Support reactions to changes	●	●
	Support organisational teamwork	●	●
	Increase organisational effectiveness	●	●
	Support collaboration and sharing of information	●	●
Competitiveness	Develop/produce new markets	●	●
	Develop/produce new products/services	●	●
	Obtain competitive advantage	●	○
	Increase organisation's competitiveness	●	●
	Display market leadership	●	●
	Support innovation	●	●
	Increase customer services and satisfaction	●	●
	Become a leader in new technology	●	●
	Improve relationships with customers	●	●
	Enhance competitive advantage	●	●
	Improve market share	●	●
	Become responsible locally (markets, government)	●	●
Aligning	Integrate IS strategic plan into business strategic plan	●	●
	Improve relationships with suppliers	●	●
	Improve resource control	●	○
	Integrate or become independent of IS function	●	○
	Improve global efficiency	●	●
	Support global organisation	●	●
	Attain global alliances	●	●
	Improve resource creativity	●	●
	Improve resource flexibility	●	●
	Improve resource learning	●	●
	Create standards	●	●
	Improve knowledge	●	●
	Compose by integrating smaller systems	●	●
	Support learning transfer	●	●

Table 3. Summary of interviewees' views on the strategic benefits of IS for Y

The following can be included from this table:

4.1 Strategic analysis benefits for Y

As demonstrated in Table 3, there are similarities and differences between the views of the interviewees, with strong similarities concerning SISP benefits. Most of these benefits are considered to be of great importance within Y's planning process. The most significant differences between the views of the CIO and the DDP are in coping with increased organisational efficiency and reducing costs.

4.2 Competitiveness benefits for Y

Table 3 reveals similarities in the interviewees' views about competitive benefits. The main difference concerns obtaining a competitive advantage as a benefit of SISP, though most of these benefits are regarded as extremely important within Y's planning process. The DDP ranked a competitive advantage as only medium in importance, whereas the CIO ranked it as highly important.

4.3 Integration benefits for Y

The similarities between the interviewees' views are quite apparent in this category of benefits (Table 3). The differences concern (a) improved resource control and (b) integrating or becoming independent of IS function. However, most of these benefits are considered highly important within Y's planning process.

5 CONCLUSION

This paper has provided a critical review of the literature relating to the strategic benefits of IS planning at Y bank. Starting with a discussion of IS roles and dimensions within a global environment, the discussion illustrates the benefits to be an important factor in the IS strategic planning process. A taxonomy of benefits was derived from the literature. These benefits are categorised according to the strategic analysis of IS, competitiveness, and alignment in section 2.

After identifying the IS strategic benefits, these benefits were connected to the investigation and evaluation of IS strategic benefits for Y bank (paper contribution). The main result of the case study was a clear indication of attention paid to IS and its benefits by strategic business units, which proved sufficient to justify supporting the decision-makers. These benefits have been identified as evaluation criteria in the IS strategic planning process to support the decision-makers throughout the

planning process. In other words, implementing such taxonomy may help practical implementation succeed as well, as it takes many different aspects of the different stakeholders' thoughts into consideration. Such stakeholders possess extensive knowledge and wide-ranging viewpoints regarding improvement of IS benefits.

The researchers' level of bias introduced while interpreting events from the subject's point of view directly conflicts with the qualitative approach, given its subjective nature. The researcher thus used multiple methods of data collection, including data triangulation, to collect the necessary data, while simultaneously avoiding bias whenever possible.

5.1 LESSONS LEARNED

Lessons learned include the following:

- The case study revealed that implementing project management skills is helpful because a large number of IS benefits need to be prioritised. These skills can contribute to making IS projects more successful and efficient through superior management of both time and resources.
- Even though the case is new to applying IS strategic planning, it emphasises the utility of benefits assessment for IS planning. The motives for highlighting this usefulness were (1) a lack of IS strategic planning sophistication and experience, and (2) the importance of evaluating IS strategic planning through developing an understanding of the strategic benefits of IS. The first point indicates that IS strategic benefits assessment is indeed a factor influencing the adoption of IS strategic planning. The second point demonstrates that Y bank desired to understand and assess the level of IS strategic planning reached through the extant IS strategic planning process. IS benefit assessment has thus been shown to be an important factor influencing the adoption of IS strategic planning.

Reference

Applegate, L., Austin, R. & Soule, D., 2008. *Corporate information strategy and management: text and cases*, McGraw-Hill/Irwin.

Apte, U. et al., 1990. Reusability-based strategy for development of information systems: implementation experience of a bank. *MIS Quarterly*, 14(4), 421–433.

Benson, R.J., Bugnitz, T.L. & Walton, W., 2004. *From business strategy to IT action: right decisions for a better bottom line*, John Wiley & Sons Inc.

Bleistein, S.J., Cox, K. & Verner, J., 2005. Strategic alignment in requirements analysis for organizational IT: an integrated approach. In *Proceedings of the 2005 ACM symposium on Applied computing*. pp. 1300–1307.

Bryman, A. & Bell, E., 2007. *Business research methods*, Oxford University Press, USA.

Burgelman, R.A., Christensen, C.M. & Wheelwright, S.C., 2008. *Strategic management of technology and innovation*, McGraw-Hill/Irwin.

Carr, N.G., 2003. IT doesn't matter. *Harvard Business Review*, 81(5), 41–49.

Cash Jr, J.I., Earl, M.J. & Morison, R., 2008. Teaming up to crack innovation enterprise integration. Key growth imperatives succeed best when specialized teams share skills, experience, and insight across the silos. *Harvard business review*, 86(11), 90.

Chan, Y.E. & Huff, S.L., 1992. Strategy: an information systems research perspective. *Journal of strategic information systems*, 1(4), 191–204.

Clarke, S., 2006. *Information Systems Strategic Management: An Integrated Approach*, Routledg.

Cunha, P. & Figueiredo, A., 2000. Interactions in Organizations: a missing element in information systems planning. In *The 5th UK Academy for Information Systems (UKAIS)*. Cardiff, UK, pp. 184-191.

Deresky, H., 2008. *International Management: Managing Across Borders and Cultures* 6th ed., Pearson Education.

Dhillon, G., 2005. Gaining benefits from IS implementation: Interpretations from case studies. *International Journal of Information Management*, 25(6), 502-515.

Earl, M.J., 1996. *Information management: the organizational dimension*, Oxford University Press.

Evans, P.B. & Wurster, T.S., 1999. Strategy and the new economics of information. In *Creating value in the network economy*. USA: Harvard Business School Press, pp. 13–34.

Ezingeard, J., Irani, Z. & Race, P., 1998. Assessing the value and cost implications of manufacturing information and data systems: an empirical study. *European Journal of Information Systems*, 7(4), 252-260.

Galliers, R. & Leidner, D.E., 2003. *Strategic information management: challenges and strategies in managing information systems*, Butterworth-Heinemann.

Grover, V. & Segars, A.H., 2005. An empirical evaluation of stages of strategic information systems planning: patterns of process design and effectiveness. *Information & Management*, 42(5), 761–779.

Hackney, R. & Little, S., 1999. Opportunistic strategy formulation for IS planning. *European Journal of Information Systems*, 8(2), 119–126.

Henderson, J.C. & Venkatraman, N., 1999. Strategic alignment: leveraging information technology for transforming organizations. *IBM Syst. J.*, 38(2-3), 472-484.

Hinton, M., 2005. *Introducing Information Management: the business approach*, Oxford, UK: Butterworth-Heinemann.

Hunter, M.G. & Tan, F.B., 2006. *Advanced topics in global information management*, Idea Group Inc (IGI).

Irani, Z, 2002. Information systems evaluation: navigating through the problem domain. *Information & Management*, 40(1), 11-24.

Irani, Z. et al., 1999. A case study strategy as part of an information systems research methodology: a critique. *International Journal of Computer Applications in Technology*, 12(2), 190–198.

Irani, Z., Sharif, A.M. & Love, P.E., 2005. Linking knowledge transformation to information systems evaluation. *European Journal of Information Systems*, 14(3), 213–228.

Irani, Z., Love, P.E. & Jones, S., 2008. Learning lessons from evaluating eGovernment: Reflective case experiences that support transformational government. *The Journal of Strategic Information Systems*, 17(2), 155-164.

Jack, R., As-Saber, S. & Edwards, R., 2006. Service embeddedness and its impact on the value chain and firm internationalisation: in search of a framework. *International Journal of Value Chain Management*, 1(1), 33–43.

Klein, H.K. & Myers, M.D., 1999. A set of principles for conducting and evaluating interpretive field studies in information systems. *MIS quarterly*, 67–93.

Laudon, K.C. & Laudon, J.P., 2004. *Managing the Digital Firm*, Upper Saddle River, New Jersey: Prentice Hall.

Laumann, M. & Rosenkranz, C., 2009. Overcoming Language Barriers for Business Process and Information Systems Integration – A Theoretical Model. In *15th Americas Conference on Information Systems (AMCIS)*. San Francisco, California.

Lee, G. & Bai, R., 2003. Organizational mechanisms for successful IS strategic planning in the digital era. *Management Decision*, 41(1), 32 - 42.

Levy, M. & Powell, P., 2000. Information systems strategy for small and medium sized enterprises: an organisational perspective. *Journal of Strategic Information Systems*, 9(1), 63–84.

Luftman, J. & Brier, T., 1999. Achieving and sustaining business-IT alignment. *California Management Review*, 42(1), 110.

Mendoza, L.E., Pérez, M. & Grimán, A., 2006. Critical success factors for managing systems integration. *Information Systems Management*, 23(2), 56–75.

Miles, M.B. & Huberman, A.M., 1994. *Qualitative data analysis: An expanded sourcebook* Second Edition., London: Sage.

Mohdzain, M.B. & Ward, J.M., 2007. A study of subsidiaries' views of information systems strategic planning in multinational organisations. *The Journal of Strategic Information Systems*, 16(4), 324-352.

Morgan, T., 2002. *Business rules and information systems: aligning IT with business goals*, Addison-Wesley Professional.

Mutch, A., 2008. *Managing Information and Knowledge in Organizations: A Literacy Approach* 1st ed., Routledge.

Papp, R., 1999. Business-IT alignment: productivity paradox payoff? *Industrial Management and Data Systems*, 99(8), 367–373.

Pearlson, K.E. & Saunders, C., 2000. *Managing and using information systems: A strategic approach*, John Wiley & Sons, Inc. New York, NY, USA.

Power, D., 2006. Adoption of supply chain management-enabling technologies in SMEs: the view from the top vs. the view from the middle. *International Journal of Value Chain Management*, 1(1), 64–93.

Prahalad, C.K. & Krishnan, M.S., 2002. The dynamic synchronization of strategy and information technology. *MIT Sloan management review*, 43(4), 24.

Premkumar, G. & King, W.R., 1992. An empirical assessment of information systems planning and the role of information systems in organizations. *J. Manage. Inf. Syst.*, 9(2), 99-125.

Robson, W., 1997. *Strategic Management and information Systems: an integrated approach* Second Edition., England: Financial Times Professional Limited.

Saglietto, L., 2009. Airline alliances: When competitiveness can be approached with specific social networks. *Competitiveness Review: An International Business Journal incorporating Journal of Global Competitiveness*, 19, 304-322.

Saunders, M., Lewis, P. & Thornhill, A., 2007. *Research methods for business students*, Financial Times/Prentice Hall.

Segars, A.H. & Grover, V., 1999. Profiles of strategic information systems planning. *Information Systems Research*, 10(3), 199.

Shore, B., 2006. Enterprise integration across the globally disbursed service organization. *Commun. ACM*, 49(6), 102-106.

Silvius, A., 2008. THE BUSINESS VALUE OF IT SEEING THE FOREST THROUGH THE TREES. In *European and Mediterranean Conference on Information Systems (EMCIS)*. Dubai.

Tai, L.A. & Phelps, R., 2000. CEO and CIO perceptions of information systems strategy: evidence from Hong Kong. *European Journal of Information Systems*, 9(3), 163–172.

Turban, E., Rainer, R.K. & Potter, R.E., 2005. *Introduction to Information Technology* Third Edition., USA: John Wiley and Sons,

Waema, T.M. & Walsham, G., 1990. Information systems strategy formulation. *Information and Management*, 18(1), 29–39.

Walsham, G., 1995. Interpretive case studies in IS research: nature and method. *European Journal of information systems*, 4(2), 74–81.

Ward, J. & Peppard, J., 2002. Strategic Planning for Information Systems. Wiley. *Chichester, England*.

Weill, P. & Ross, J.W., 2004. *IT governance: How top performers manage IT decision rights for superior results*, USA: Harvard Business School.

Yin, R.K., 2008. *Case study research: Design and methods*, UK: Sage publications, INC.