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Information Systems Strategy & Implementation

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One of the leading areas of focus among executives is that of Information Systems (IS) strategies and their implementation. This mini-track focuses on ways in which organizations effectively implement IS strategies in their organizations. Specifically, what factors or models can be developed/implemented to measure the success of IS strategies on the organization's productivity and profitability. So what constitutes a strategic information system? For the purpose of this mini-track, we define an information system to be strategic if it is aligned with business goals and strategies and if it has an impact on organizational performance.

Traditional methods of developing business strategies have failed to take full advantage of technology. In the past, information technology (IT) was typically treated as a "cost center" or viewed as an "expense" rather than an enabler of business value. Strategic information systems shed new light on technology and its role in the development of business strategies. It is no longer economically feasible to treat IT as a lower level support tool; failure to leverage IT may seriously hamper the firm's performance and viability in today's global, information-intensive world. The need to integrate business strategies with IT goals and objectives to evaluate and assess the level of integration of business and IT strategy within firms is paramount. By concentrating on the integration of strategy and infrastructure, firms may not only achieve synergy and facilitate the development of business plans, but increase the profitability and efficiency of their firm within its industry (Papp, 1998). These tangible benefits allow management to focus on the application of IT as a means to leverage their core competencies, skills, and technology scope, resulting in improved efficiency. The major reason is to ease the development and implementation of cohesive organization and IT strategies that enable firms to focus on the application of IT to improve the business. By understanding and leveraging the Business/IT partnership, organizations can concentrate on the application of IT to enable the business strategy. This harmony can be extended and applied throughout the organization as new opportunities are identified.

Over the past three decades, billions of dollars have been invested in information systems and technology. Nevertheless, organizations seem to find it difficult or impossible to harness the power of information technology for their own long-term benefit, even though there is worldwide evidence (Earl, 1983 &

1993; Robson, 1994; King, 1995) that IT has the power to transform whole industries and markets. Strategic alignment, a method of applying IT in an appropriate and timely way, in harmony with business strategies, remains a key concern of business executives (King, 1995; Henderson and Venkatraman, 1990 & 1996; Earl, 1983 & 1993; Luftman, 1993 & 1996; Goff, 1993; Liebs, 1992; Watson & Brancheau, 1991). In fact, alignment's importance has been well known and documented since the late 1970's (McLean & Soden, 1977; IBM BSP, 1981; Mills, 1986; Brancheau & Wetherbe, 1987; Dixon & John, 1991; Niederman, et. al., 1991; Earl, 1983 & 1993). This classification has continued as indicated via its persistent top ranking in the business press by executives. Alignment seems to grow in importance as companies strive to link technology and business in light of dynamic business strategies and continuously evolving technologies (Papp, 1995). Importance aside, what is not clear is how to achieve this harmony between business and IT, and what the impact of misalignment might be on the firm (Papp & Luftman, 1995). The ability to achieve and maintain this synergistic relationship is anything but easy. For years, firms have been channeling billions of dollars into technology in an attempt to successfully incorporate technology into their processes and long-term plans. Many of these efforts have failed despite overwhelming evidence of IT's ability to transform both individual firms and entire industries.

The alignment of information technology (IT) and business strategy to leverage the capabilities of IT and to transform the business has increased in importance over the past few years, as firms strive for competitive advantage in a diverse and changing marketplace (Faltermayer, 1994; Adcock, Helms, & Wen-Jang, 1993; Cardinali, 1992). In light of this, there has been a great deal of research and insight into the linkages between Business and IT (Chan & Huff, 1993; Luftman, 1996; Earl, 1993; Henderson, Thomas & Venkatraman, 1992), the role of partnerships between IT and business management (Keen, 1996; Ives, Jarvenpaa, & Mason, 1993), as well as the need to understand the transformation of business strategies resulting from the competitive use of IT (Boynton, Victor, & Pine, 1996; Davidson, 1996). Firms have been able to change not only their business scope, but also their infrastructure as a result of innovation regarding IT (Keen, 1991; Foster, 1986).

Strategic alignment and IS strategy implementation sheds new light on IT and its role in the development of business strategies. It considers the strategic fit between strategy and infrastructure as well as the functional integration between business and IT. By focusing on business and IT, strategic alignment addresses both strategy and infrastructure elements across the organization (Henderson & Venkatraman, 1996; Papp, 1998; Luftman, Papp & Brier, 1995). Several frameworks have been proposed to assess the strategic issues regarding the role of IT as a competitive weapon. There have also been numerous studies that focus on business process redesign and reengineering (Rockart & Short, 1989; Davenport & Short, 1990; Hammer & Champy, 1993; Hammer & Stanton, 1995) as a means to achieve competitive advantage with IT. This advantage comes from the appropriate application of IT as a driver or enabler of business strategy.

Thus, strategic IS encompass many areas and technologies that are used by organizations to leverage their use of technology for increased productivity and competitive advantage. Numerous frameworks, plans, and strategies are used to facilitate the integration of business and technology strategies. The series of papers in this mini-track focus on many of these issues and through applied research, case studies, and empirical investigation, provide managers and academics with insights into the development and implementation of information systems strategy.

Additional Resources & Information

Strategic Information Systems Websites

ISWORLD's (http://www.isworld.org) Strategic IS page (http://www.fba.nus.edu.sg/isworld/isw_sis.htm)

Upcoming Conferences

IRMA 2001 (http://www.irmainternational.org/call2001.htm) in Toronto, Canada 5/20 - 5/23/01

Eleventh Australasian Conference on Information Systems (ACIS) (http://www.cmit.org/acis2000/conferen ce.htm), Brisbane, Australia, 6-8 December 2000

Twenty First Annual International Conference on Information Systems (ICIS) (http://www.sims.monash.edu.au/icis20 00), Brisbane, Australia, 10-13 December 2000.

15th Annual Conference of the International Academy for Information Management (IAIM), (http://www.iaim.org/iaim00.html) Brisbane, Australia, 8-10 December, 2000.

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