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E-business's impact on organizational flexibility

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ABSTRACT

Organizations are finding that their ability to respond to unpredicted changes in the market is becoming a key factor in survival. The ability to adjust e-business processes to customer preferences (flexibility) has become a necessity for online systems. Despite the interest in e-business flexibility the academic literature has not kept pace with industrial developments. This research study builds upon previous work through two investigations. First, the results of five case studies are used to develop a seven (alliance/joint decision management and intelligence, enterprise-wide change management, organizational learning, process oriented agility, network centric information management, leadership of transformation and knowledge exchange meetings) factor model that depicts the influences of flexibility on organizational effectiveness in e-business environments. Second, this paper illustrates how the model can be used as a benchmarking tool and has the potential to become a key learning mechanism. The authors discuss the conclusions and managerial implications of the findings.

1. Introduction

Modern organizations are under increasing pressure from stakeholders to find new ways to compete effectively in dynamic markets and changing customer preferences. Consequently, organizations have sought structures and technologies that improve flexibility through the implementation of e-business models. Consistent with Nadkarni and Narayanan (2007), we argue that flexibility is more important in fast-changing business environments. During the earlier commercial phases of the Internet, a plethora of e-business models were advocated, prompting management to search for the best model (Phillips, 2003). The differences between an e-business model and an e-business strategy are significant issues for any organization (Margretta, 2002).

E-business models ignore competition and organizational dynamics. Yet competitiveness is more of an issue, particularly as information-age technologies become more available and accessible to competitors. Increasing competition force commercial organizations to diversify into new markets and operate in multiple sectors. These threats make the creation of alliances with suppliers/competitors a useful response. However implementation can become problematic due to issues surrounding system interoperability, process interoperability, and conflicting organizational and sometimes national cultures. Global commercial organizations face threats from smaller, more nimble organizations that possess network-centric operations. Beidleman and Ray (1998), contend that financial services firms are increasingly caught up in the flexibility revolution. Supporting this assertion Adolf and Hooda (1997) refer to the new business model of banking as achieving a level of organizational agility and responsiveness that permits continuous pursuit of new opportunities as they emerge in this fast-changing market.

There has been significant managerial interest in the opportunities available to use e-business solutions to create competitive advantage. As stated by Swaminathan and Tayur (2003) e-business can be defined as a business process that uses the Internet or other electronic medium as a conduit to fulfil business transactions. However, a critical assumption is that e-business encompasses e-commerce, and goes far beyond e-commerce to include the application of information technologies for internal business processes as well for the activities in which a company engages in commercial activity with suppliers and customers (Phillips, 2003). These internal activities can include functional activities, such as marketing, accounting, human resource, and operations.

As organizations embrace the Internet, one of the burning issues management face is that of getting people to work differently in organizations that are changing shape. E-business organizations need to have a combination of inside–out and a range of competencies. Wang (2000) asserts that e-business should be viewed less as a phenomenon of purely online business and more as a challenge of organization redesign. Phillips (2003) points out that organizations looking to implement an e-business strategy must align themselves internally with the demands that the dynamic environment imposes

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on strategic behavior. A good example of this is, despite making a significant investment in their e-business strategies and IT, some managers remain unclear about how to adapt their organization. Advancements in technology create the opportunities for new forms of arranging work, such as collapsing boundaries between suppliers, customers and competition. Management need to identify the key attributes and processes that are perquisite for competitive advantage. According to Neilson et al. (2000) the evolution to e-organization takes place along seven key dimensions — organizational structure, leadership, people and culture, coherence, knowledge, alliances and governance.

Organizations are increasingly facing the challenge of e-business, that is, the use of Internet tools to support their business processes (Cagliano et al., 2003). Strategic business units are finding that their ability to respond to unpredicted changes in the market is becoming a key factor in survival. Consistent with Dreyer and Gronhaug (2004), flexibility relates to an organization's capacity to change or exploit external opportunities, and is an important competence.

This paucity of systematic studies on e-business that explore the impact on organizational structure and processes creates a significant gap. The primary purpose of this paper is to highlight some of the strategies required to enhance flexibility in an e-business environment. A secondary purpose is to explore how flexibility affects organizational effectiveness, and to identify factors effecting success in an e-business environment. The remainder of this paper is organized as follows. First, e-business strategy is discussed. Then, organizational flexibility in an e-business environment is considered. Next, the research methodology is outlined, followed by empirical findings. Finally, major themes are discussed; conclusion and managerial implications are drawn.

2. E-business strategy

The dramatic growth in the number of companies that use the Internet to bring about competitive advantage prompts many questions for the strategist. The concept of e-business strategy addresses the issue of how the Internet can reshape companies and provide competitive advantage (Cagliano et al., 2003). Phillips (2003) believes that success is dependent upon management being open-minded to understand and derive real value from the Internet. Bremser and Chung (2005) state that constant change in the environment means continually evolving strategies, new products, and new processes to adopt. Lumpkin and Dess (2004) explore several ways that firms are using the Internet to add value, and highlight four value-adding activities — search, evaluation, problem-solving and transaction. Krell and Gale (2005) observe that much of the discussion of e-business either fails to address strategic issues or addresses only the limited topic of strategies for electronic markets.

Stroud (1998) points out that the benefits the Internet can deliver will not materialize, unless a company adapts its structure and processes. Yet, very few theoretical frameworks truly help practicing e-business managers understand and craft a winning strategy (Brunn et al., 2002). Willcocks and Plant (2001) who were searching for B2C e-business initiatives for common paths and practices, note two themes. First, the movement towards online is an evolutionary process for bricks-and-mortar companies. Second, planning and flexibility in a turbulent market and technology environment is a goal for the strategist.

Now that the Internet presents a source of innovative opportunities, calls to rethink the diffusion of traditional strategy formulation with new approaches are in vogue. According to Porter (2001) the greatest impact of the Internet is its ability to reconfigure traditional industries. Porter (2001) asserts that his five forces framework (Porter, 1980) can be used in an e-business environment. The following five underlying forces can determine e-business industry attractiveness: threat of substitute product/service, bargaining of suppliers, barriers to entry, bargaining power of buyers and rivalry among existing competitors.

Some debate still remains about the merits of the Internet. For example, in contrast to Porter (2001), Tapscott (2001) is of the opinion that the networking effects alter the competitive dynamics of different industries, and facilitate a shift from those organizations that vertically and virtually-integrate. Interestingly, Kim et al. (2004) report that strategies that integrate elements of cost leadership and differentiation will out-perform cost leadership or differentiation strategies. Strategies that incorporate an integrating dimension should be an objective rather than adoption of a Porter's stuck in the middle strategy, which suggests no clear strategic focus.

An increasing number of authors propose models for the management of organizational change as firms' migrate along the digitization path. Sharma (2004) presents a change management model for e-business that involves three phases: people; processes and technology; customers, suppliers and other value chain partners. Earl (2000) advocates a six stage evolutionary model of e-business implementation. To help managers move from traditional to e-business, Hackbarth and Kettinger (2000) propose a methodology that charts the path to effective digital business strategy. Their four stage methodology makes use of SWOT analysis and each stage has its own activities, tasks and outputs. Gardner and Ash (2003) emphasize the nonlinear and emergent nature of the necessary changes and consider corporate intent and strategy, application of the business models and the role of an agent or moderator. Ash and Burn (2003) propose a model of transformation for guiding organizations through the successful implementation of their e-business strategy. Their case findings demonstrate, the integration of technologies, the differentiation of business models, and the demonstration of value adding in products and services along the customer and supplier chains. Krell and Gale (2005) postulate another model which could assist addressing technology, business processes, strategy, and organization change issues.

3. Organizational flexibility

Organizational flexibility is the degree to which an organization possesses a variety of actual and potential procedures to improve the controllability of the organization and environment (Palanisamy, 2005). The processes underlying flexibility are multidimensionsal with prior research adopting differing perspectives, such as economic (Klein, 1984), organizational (Jennings and Seaman, 1994), operational (Newman et al., 1993) and strategic (Sanchez, 1995). More holistic and strategic approaches now supersede the traditional approaches of flexibility. Ozer (2002) highlights the importance of considering a holistic view by presenting various sources of flexibility, such as: technology, human resources, operations, marketing, finance and management.

Given that the current business environment remains fast moving, turbulent, and unpredicatable due in part to the ever changing trends in e-business, the need for flexibility becomes stronger. Nevertheless, many firms do not retain the flexibility to adopt e-business activities to constantly changing business imperatives. Organizations of all sizes realise the need for flexible structures when implementing their e-business strategy. Ultimately, the resource capability of an organization together with capacity for exploitation, determine the level of flexibility firms may exercise in uncertain environments (Fredericks, 2005).

The nature of industrial dynamics, structural changes in the relationships among customers, suppliers and within the firm has ignited interest in flexibility. Backhouse and Burn (1999) note a certain lack of consistency in the definition of flexibility, and emphasized the differences between agility and flexibility. Backhouse and Burn (1999) define agility as the ability of the enterprise to adapt to external changes in the external environment. Whereas, flexibility is the ability of companies to respond to a variety of customer requirements which exist within parameters. Proposals on how to