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Benefits, impediments and critical success factors in B2C E-business adoption

Chris Dubelaar, Amrik Sohal*, Vedrana Savic

Department of Marketing, Faculty of Business and Economics, Monash University, P.O. Box 197, Caulfield East, Vic. 3145, Australia

Abstract

This paper reports the results of a study carried out to assess the benefits, impediments and major critical success factors in adopting business to consumer e-business solutions. A case study method of investigation was used, and the experiences of six online companies and two bricks and mortar companies were documented. The major impediments identified are: leadership issues, operational issues, technology, and ineffective solution design. The critical success factors in the adoption of e-business are identified as: combining e-business knowledge, value proposition and delivery measurement, customer satisfaction and retention, monitoring internal processes and competitor activity, and finally building trust. Findings suggest that above all, adoption of e-business should be appropriate, relevant, value adding, and operationally as well as strategically viable for an organization instead of being a result of apprehensive compliance.

Keywords: B2C adoption; E-business; Critical success factors; B2C benefits; B2C impediments

1. Introduction

Organizations adopt e-business for several reasons and perceived benefits. Some of these benefits include better management of information, better integration of suppliers and vendors, better channel partnership, lower transaction costs, better market understanding, and expanded geographical coverage (Damanpour, 2001). Typically, successful exploitation of e-business requires making a creative link between an organization's strategy and the technology that supports it, and managing pervasive information and communication technology applications that are increasingly integrated and convergent, and that enable flexible and adaptive behavior on the part of the firm and its employees.

The definitions of e-business are many and varied. For the purpose of this paper, e-business is described as:

> "utilization of networks and near-time interactions to accomplish some combination of six core business goals: empowerment of customers, enhancement of trade, increased business agility, extension of enterprises in a virtual manner, evolution and invention of products and services, and the development of new markets and audiences" (Sharma, 2000, p. 28).

In this paper, we explore one form of e-business, namely business to consumer (B2C) electronic commerce. This form of e-business is often associated with the buying and selling of information, products, and services via the Internet, which seeks to replace traditional sales channel with online channel to consumers (Griffith and Palmer, 1999).

While many organizations across all industries have embraced various types of e-business solutions, there are a considerable number of cases indicating that creating the successful dot.com enterprise is a challenging task. Channel conflicts, legacy systems, resistant business partners, confusion on strategy, and corporate cultures prevent existing firms from successfully integrating e-business into business practices (Kanter, 2001; Kalakota and Robinson, 1999). In particular, established companies, now widely referred to as 'old economy,' are facing challenges in e-business adoption that differ from those experienced by pure e-business or so called 'new economy' companies. The literature clearly supports the need for more detailed investigations of how organizations manage problems associated with e-business adoption, and which factors are associated with successful e-business adoption.

* Corresponding author. Tel.: +61 3 9903 2033; fax: +61 3 9903 2979.
E-mail address: amrik.sohal@buseco.monash.edu.au (A. Sohal).

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This paper reports the results of a study carried out to assess benefits expected and benefits derived from e-business adoption, the major obstacles in e-business adoption and the critical success factors in B2C environment. In order to explore these factors, we conducted a multi-case study of a selection of both established, old economy and online, new economy companies with major e-business activities. The exploratory nature of this study does not promote any specific set of hypotheses. Instead it provides empirical evidence for future theory development focusing on success factors and obstacles experienced in e-business adoption across several companies.

In Section 2 a review of existing literature is presented on which this study is based. The literature review is followed by an outline of qualitative research design, case study research strategy, sample selection, and interviews. Section 4 outlines major findings and discusses (a) expected and derived benefits, (b) major impediments experienced by the B2C case study companies investigated and (c) the critical success factors. Finally, Section 5 presents a summary of the findings that are believed to be of considerable benefit to organizations currently involved in e-business activities, as well as those considering the adoption of e-business solutions.

2. Literature review

As the rhetoric about new economy, e-business rules and the Internet as providers of competitive advantage is slowly diminishing, many established companies are prioritizing their strategic options, of which e-business initiatives are an important component. Previous studies have shown that B2C e-commerce offers many potential benefits to companies, including access to geographically dispersed markets, low cost in information exchange, low transactional cost, low cost marketing, close customer relationships aided by one on one marketing, ability to compete on non-price dimensions, and many more.

Adoption of e-business is expected to result in generation of new forms of immediate value for companies. In order to realize the full advantages of e-business solutions, organizations need to identify the critical success factors. Success is defined as 'having achieved the desired results, effects or outcomes' (Chambers, 1994). Critical success factors are defined as those few key areas where things must go right for business to prosper (Rockart, 1979). It has been suggested that management needs to pay attention to these areas, and make performance measures integral to the definition of critical success factors in order to preclude poor enterprise performance (Khandelwal, 2001). Performance is represented by the achievement of progress towards the desired state. Strassman (1985) summarizes this point very clearly in stating that "You cannot measure what is not defined. You also cannot tell whether you have improved something, if you have not measured its performance", (p. 100).

The attributes that ensure overall success of organizations can be classified as primarily environmental, structural, or management-oriented (Vecchio and Appelbaum, 1995). Successful organizations tend to focus on customers and their needs, on adaptation of structures to meet the needs of their missions, emphasis on creating action that ensures goal attainment, and on management commitment to the organization's original arena of core expertise (Appelbaum et al., 1998). Successful organizations also tend to stress a single value, such as delivering a quality product, and finally managers in successful companies focus on achieving the agreement or consensus of employees by actively seeking employee suggestions and a positive work-group spirit (Vecchio and Appelbaum, 1995).

In the context of e-business adoption, Porter (2001) emphasized that in order to participate in the 'new economy' marketplaces successfully, and thus to gain a competitive advantage requires building on the proven principles of effective strategy, and integrating e-business as a complement to traditional methods of competing. More precisely, the key to e-business success is to complement an organization's specific business knowledge with the necessary awareness of the new opportunities created by e-business (Norton, 2000). Central and axiomatic to this viewpoint is that adoption of e-business should be appropriate, relevant, value adding, and operationally as well as strategically viable for an organization instead of being a result of apprehensive compliance.

The recent literature addressing the management of e-business highlights the diversity of factors that contribute to success or failure of e-business adoption. For instance, Butler (2000) emphasized that e-business success depends on a company's commitment to e-business leadership, roles and responsibilities, cross-functional interdependencies, budget matters, and management structure. This implies that executives need to have a solid understanding of the rapidly changing capabilities for technology, and communicate the value of e-business throughout the organization. Kalakota and Robinson (1999) state "the creation and implementation of an e-business project is inextricably linked to the management of change" (p. 60). This requires systematic attention to learning processes, organizational culture, technology infrastructure, people and systems thinking. A summary of critical success factors identified from the literature (e.g. Phan, 2001; Turban et al., 2000; Porter, 2001; Butler, 2000) is depicted in Table 1 presenting a classification of success factors into three major categories: strategic, structural, and management-oriented factors.

Rodgers et al. (2002) suggest that in order to realize the full advantages of e-business solutions, organizations should identify a suitable vision for the firm, appoint an e-business champion who owns the e-transformation process, create a collaborative organizational culture, develop a plan to achieve the e-transformation, implement a rigorous communication strategy for feedback loops from constituents, and finally create flexible e-business solutions. Further, Gupta et al. (2002) suggest that the networks