

EVALUATING E-COMMERCE STRATEGY DEVELOPMENT FOR ORGANIZATIONS: A LITERATURE REVIEW

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Abstract

This article provides a concise concept and explanation of electronic commerce within retail organization. The review of related literature discusses the concept and application areas of e-commerce within organizations. The review will also tackle the important strategic management concepts such as transaction cost theory and relationship marketing and how e-commerce is enabling organizations to achieve increased efficiency, improved communication, and lower costs across its value chain.

Keywords: E-Commerce, literature, strategy, development, intraorganizational, relationship marketing, retail, transaction cost theory.

Introduction

According to the International Engineering Forum, e-commerce is “an emerging model of new selling and merchandising tools in which buyers are able to participate in all phases of a purchase decision, while stepping through those processes electronically rather than in a physical store or by phone (with a physical catalog). (online: International Engineering Forum)”

02 E-commerce enables a customer to access product information, select items to purchase, purchase items securely and have the purchase settled financially. While the notion of e-commerce as the ability of organizations or a person to sell over the Internet is very popular, the research paper will adopt the definition of Organization for Economic Co-Operation and Development (OECD). E-commerce can be defined as “the total of all applications that pertain to online communications and transaction (OECD, 2000).” The definition better suit our purpose of discussing e-commerce in the context of strategic management. The research views e-commerce holistically, which encompasses the communication between organizations and customer over the Internet, the completion of one-time or on-going online transactions, and e-CRM systems.

The emergence of e-commerce in the retail sector is one of the most widely adopted and anticipated development in the industry.

Following the success of Amazon, many brick-and-mortar retailers jumped into the dot com bandwagon and established their online presence in the World Wide Web. Many have adopted e-commerce capabilities out of a fear of falling behind competitors or as a result of the general momentum to expand the use of an existing Internet presence. Nonetheless, the main value proposition for organizations adopting an online presence is the prospect of increasing revenue from new markets and using a lower-cost, electronic-distribution channel (online International Engineering Forum). With a strong demand from organizations in

creating an online presence, internet service providers (ISPs) have begun to offer electronic-commerce hosting services. ISPs often position as an outsourced service provider of the customers’ electronic-commerce capabilities, managing the networking and server aspects of the initiatives. Such services are important consideration for the roll-out e-commerce sites as it allows organizations to leverage on the expertise of ISPs and allows organizations to concentrate on their core businesses (online International Engineering Forum). From the customer’s perspective, the main benefit of an e-commerce system is the convenience it brings to consumers, who are constrained by busy schedule and numerous activities. The e-commerce system enables a customer to locate and purchase a desired good or service over the Internet when the customer is ready to make the purchase. Its function is synonymous to a virtual store (online International Engineering Forum).

From the merchant’s perspective, the e-commerce system enables the organization to take advantage of the strengths of online store and increase revenues. One of the key benefits of implementing an online store is the capability to cover greater market reach and a complementary distribution channel to its existing brick-and-mortar stores. However, in order to effectively implement an e-commerce strategy, the e-commerce system must recreate or utilize existing data and business processes. The merchant must recreate the same shopping experience in its online store providing in-store assistance, secure payment process, catalogs and prices about the products and services, inventory management, and transaction capabilities (including credit authorization, tax computation, financial settlement, and shipping) (online International Engineering Forum). Furthermore, e-commerce not only allows merchants to take advantage of market reach, but it also enables merchants to redefine and enhance an enterprise’s brand strength, customer-service capability, and supply-chain efficiency. An e-commerce site is one of the areas of an enterprise infrastructure that is open to customers via the Web, but it is linked with other information system of the

enterprise value chain (online International Engineering Forum). In implementing an e-commerce site, provision of the basic system requires an Internet connection, a Web-application server and e-commerce application software, and a personal computer for the shopper. On the buyers side, consumers are driven to the online retail store through advertisements, interesting features, needed information, and directory. On the sellers side, merchants are driven to the online space because of its ease of entry, increasing website traffic, ability to sell and integrate marketing messages (online International Engineering Forum).

E-Commerce Strategies and Business Drivers

A number of initiatives implemented within an organization are driven by a market need. All industries are characterized by trends and new developments that gradually or speedily produce changes important enough to require a strategic response from participating firms. The popular hypothesis about industries going through a life cycle helps explain industry changes but is still incomplete (Porter, 1980 p. 157-162). The life-cycle stages are strongly keyed to changes in the overall industry growth rate (which is why such terms as rapid growth, early maturity, saturation, and decline are used to describe the stages). Yet there are more causes of industry change than an industry's position in the life cycle (Porter, 1980 p. 157-162).

While it is important to judge what growth stage an industry is in, there's more analytical value in identifying the specific factors causing fundamental industry and competitive adjustments. Industry and competitive conditions change because forces are in motion that create incentives and pressures for change (Porter, 1980 p. 162). The most dominant forces are called driving forces because they have the biggest influence on what kinds of changes will take place in the industry's structure and competitive environment.

The Internet and e-commerce opportunities are unquestionably spawning a sweeping business

revolution that altered industry boundaries, opens up all kinds of new business-to-business (B2B) and business-to-consumer (B2C) market opportunities and threats, sparks competition from new and entirely different breed of enterprises and mandates fundamental changes in business practices (Thompson and Strickland 2001). In his book *The Business of E-Commerce: From Corporate Strategy to Technology*, Paul May discusses four business drivers for adopting an e-commerce strategy. First, organizations have the compulsion to catch up with competitors or to gain competitive advantage by being early adopters of the new technology. Organization's constant pursuit to gain competitive edge in the marketplace is a primary concern and part of a survival component in the business strategy. Second, organizations need to develop a credible e-commerce channel from its current online portfolio. Third, organizations are constantly looking for ways to reduce cost and increase efficiency within its value chain. E-commerce can be a creative force in delivering reduced transaction cost, increased communication and coordination, and improve business processes. Fourth, e-commerce enables organizations to improve its value chain by creating strategic supplier partnership and delivering customized customer solutions. It allows organizations improve business' infrastructural capabilities to play as an extended enterprise and not merely a single business entity delivering greater value to its customers (May, 2000). Each of these drivers can be harnessed as a propulsive force for the business, rather than a deflative or immobilizing one (May, 2000).

Application areas of E-commerce

Six key emerging application areas in electronic commerce can be identified. It can be organized into two important domains: business-to-consumer (B2C) and business-to-business (B2B). The application areas include categories in consumer retailing to real-time business-to-business collaboration (May, 2000). Retailers were the first adopters of the business-to-consumer e-commerce. Retailers found selling products and services online as a promising channel of distribution

for its products and reaching new markets. Nonetheless, B2C e-commerce is now more diversified and classified into three application areas which include retail, auction, and advice (May, 2000). The three application areas of B2C e-commerce are retail, auctions, and advice. Although each has its own distinguishing characteristics, and dynamics, a consistent theme underlies the development of all three. This is the increasing “busyness” of consumer lifestyles: the extension from work life into private life of a culture of ever-decreasing time-frames and ever-increasing obligations. Lack of time and complexity of choice drive the growth of products and services in each of these areas (May, 2000). Business-to-consumer is a term that stresses the direction of delivery: B2C e-commerce is supposedly something done by business to consumers. Yet this domain is founded on intense customer focus. Insight into the conflicting desires and pressures affecting consumers is a powerful ally in building successful strategies in this highly competitive area (May, 2000).

Business-to-business, on the other hand, is the umbrella term used to refer to transactions between businesses conducted online, and the business networks and supply chains that make these transactions possible. While B2B activity has always, taken place, the Internet brings with it a new framework, B2B companies no longer need to depend on the traditional one-to-one model for business transactions (Michel, 2003). Procurement, inventory exchange, and real-time collaboration are relatively obscure categories of application, which have the potential to flip many businesses inside-out. Procurement introduces process improvements in the buying functions of organizations and also points the way to a more competitive environment in inter-company trading. Inventory exchange introduces the mechanism of the market to smooth out supply and demand inefficiencies across entire value chain, potentially lowers transaction and carrying costs, and focuses on improving exchange of supplier information. Real-time collaboration allows organizations to cooperate as fluid colonies of actors, undermining the stability of companies who prefer hands-off relationships or who prefer their reality-

checks to be presented monthly (May, 2000).

E-Commerce application in Retail Industry

Retailers are now increasingly adopting electronic commerce as another distribution means of selling products and services. Online channels have also proved increasingly popular amongst retail companies within other formats such as hypermarkets or catalog retailers, who have attempted to expand into the sector to escape from stale growth within their respective markets (Datamonitor 2006).

Datamonitor estimates the global Internet retail sector valued at \$656.4 billion in 2005, representing a compound annual growth rate (CAGR) of 30.3% over the 2001-2005 period. The estimate is based on the total revenues generated through the sale of retail goods via online channels, valued at retail selling price, with any currency conversions calculated using constant 2005 annual average exchange rates (Datamonitor 2006). With the number of Internet users increasing exponentially year-on-year, the industry has experienced strong global growth within the global Internet retail sector. Much of the demand for online purchases is due to the escalating number of working mothers and time-starved consumers who are conveniently seeking ways of shopping without the hassle of driving to a retail store and falling in-line (Datamonitor 2006). At present, drugs and health & beauty aids are the sector's most lucrative segment in 2005, accounting for a total of \$154 billion in total revenues or 23.5% of the retail sector's total value. Computer, hardware, software, and supplies contributed significant revenues in 2005, generating \$114.9 billion in revenues or 17.5% of the sector's total value (Datamonitor, 2006). While analysts do not see a similar spectacular growth in the global Internet retail industry, experts still are optimistic the pace of revenue expansion for the next four years. Industry experts project to the expansion of industry to remain strong valuing the industry at \$1.169 trillion by 2010. This translates to 12.2% CAGR over the 2005-2010 period (Datamonitor, 2006). In terms of revenues generated per region, Datamonitor reports that Europe has the largest market share in the global

Internet retail sector with 44.4% of total value, followed by the United States and the Asia Pacific with 22.5% and 21.7% respectively (Datamonitor, 2006).

Competitive Landscape in the Global Internet Retail Industry

Competition within the online retail space is cutthroat; nonetheless, as more and more companies are entering into the online retail space in an attempt to take on the rapid growth within the online retail sector and not be left behind by competition. In recent years, issues such as security, online fraud, and privacy are one-by-one being resolved by online stores and companies have been able to allay some of the fears of consumers on buying online. This assures consumers on the ability of online retail stores to increase the reliability and experience of shopping online and thereby increasing the confidence of consumers over the Web (Datamonitor, 2006). The ability of online retail stores to build strong brands in the Internet is still difficult. Leading companies include Amazon, eBay, Columbia House Company, and Priceline.com. Nonetheless, more and more retail companies are expanding to the sector to diversify their revenue streams and escape from the stale growth within their respective markets (Datamonitor, 2006). Critical Success Factors for Electronic Retailing Despite the pronounced benefits of operating online retail stores and increasing number of users visiting the online stores, converting visitors to customers is still a big question mark for many retailers. According to BusinessWeek, less than 5% of people visiting a Web site ever turn into a paying customer. While many retailers have been able to figure out how to do reliable and cost-effective shipping of goods and improve site visit by increasing advertising cost, many industry experts emphasize on the importance of customer relationship in converting window shoppers to paying customers (online BusinessWeek).

Before discussing the importance of developing and cultivating long-term customer relationship, we shall first discuss transaction cost theory and how e-

commerce reduces transaction costs within the organization.

Transaction Cost Theory

Transaction Cost Theory is largely built on Coase's (1937) critical insight on transaction costs as contained in his seminal article "The Nature of the Firm." Coase (1937) posited that organizations exist because the cost of managing economic exchanges between firms (transaction costs) is sometimes greater than that of managing exchanges within firms. (Hoskisson et al. 1999). Rowan (1997) further elaborates the transaction cost theory follows a general lifecycle of ex ante costs of initiation (search and information costs), agreement (e.g., costs of negotiations and reaching an agreement) and ex post costs of control and adjustments. Generally, the value of transaction cost is dependent on the kind and frequency of transactions, on the asset specificity of investments in the transactional relationship of both partners, on environmental uncertainty (Groenewegen, 1993; Henley & Tsakalotos, 1993). Organizational structure would govern the transactions minimize the sum total of transaction and production costs (Galbraith, 2002). Chandler (1997, 14) defines organizational structure as the "design of the organization through which the enterprise is administered". The transaction costs relevant to the composition of the organizational structure are rooted in the internal transactions between divisions (e.g., of different products), functions, and geographic units of the organization (Chandler (1997); Wind (2001)).

Malone (1987) explains that transaction costs exert a significant influence on the design of organizational structure, particularly on the choice between functional and divisional structures. Furthermore, transaction costs also affect the level of autonomy of divisions (Argyres, 1996; Evans, 2004) and geographic units (Castellani and Zanfei, 2004). Further, May (2000) explains that transaction cost theory do not view a firm boundaries as a given, but emphasizes on the trade-off between transaction costs and production

costs that arise from coordination of hierarchy, market, or various hybrid forms. May (2000) explains that aside from the organizational structures, make-or-buy decisions such as outsourcing or integrating functions are dependent on transaction costs. Integrating function includes research and development, distribution, portfolio and diversification decisions, and the form of international market entry.

Beyond The Transaction: Establishing Long-Term Relationships

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Government deregulation has resulted in increased competition in industries such as transportation, energy, and telecommunications. Companies have broader geographic market scope and partnering with international suppliers. Efficient supply chains and the Internet have allowed for more sophisticated customer needs acquisition, fulfillment, and tracking. Christopher *et al* (1999) relates the eventual inadequacy of the transaction-based model: “Critics have long argued that these models and the assumptions on which they were based were inappropriate for industrial and services contexts, where relationships with customers were often on-going and of pivotal importance. They were also felt to be inadequate when applied to marketing in the international arena. Marketing management, as it was usually taught, represented neither the aspirations nor the reality of these branches of marketing. With the arrival of the recession in the 1990s it became widely recognized that, even in consumer markets, this classical marketing paradigm had lost its potency.”

Defining Relationship Marketing

The theoretical values of relationship marketing are organic and developing in new beliefs and direction as it faces changes in the market place (Christopher, 1999; Curry, 1998; Payne, 1995; Dwyer & Tanner, 2002) as well as changes in the methodologies and tools (Dwyer & Tanner, 2002; Roe, 2004) with which to assess it. For example, relationship marketing has often been seen as a means of creating value with

individual customers (Payne, 1995), marketing based on interactions within networks of relationships (Dwyer & Tanner, 2002), interactions stages of development (Curry, 1998; Håkansson & Snehota, 1995; Ford, 1990), customer retention (Curry, 1998). While relationship marketing has often been defined as the relationship between the company and the customer, recent literature has also introduced the concept of being concerned with other parties external to the company, such as distributors, suppliers, etc. (Christopher *et al*, 1999). This variation may be attributed to the differences in interpretation of phenomena; Dwyer & Tanner (2002) point out the interpretation-research connection: “Let’s stop fooling ourselves: All research is interpretive! There is interpretation all along, from the very start of the project until the very end.”

Despite the variations in definitions, relationship marketing borrows heavily from studies on customer service and customer retention. Scholars suggest that more than single-sale transactions, it is often desirable for companies to establish a longer-term, mutually beneficial (value-creating) relationship between the organization and its customers (Curry, 1998). Blattberg (1990) posits that the growth of a business may be viewed as acquiring and retaining customers so as to realize the full potential value of the customer base. From the seller’s point of view, such relationships serve as effective entry barriers, improve differentiation, and in the long-term, result in more profitable returns (Hoffman & Bateson, 2002). For retailers, the must-have data are customers’ purchase histories. That information reveals much more about their habits than a lot of other data that retailers used to rely on, like demographics. By analyzing transactions and even how people are searching on Web sites, companies can readjust their product offerings on the fly (online BusinessWeek).

In Conclusion

The Internet is undeniably an important change catalyst in the global market environment. It has altered industry boundaries, opened up all kinds of new business

opportunities, and changed the rules of traditional business practices (Thompson and Strickland 2001). The emergence of e-commerce is largely a result of driving forces within the industry. It seems plausible to accept that the phenomenal growth of global Internet retail sales is due to the increasing “business” of consumer lifestyles: the extension from work life into private life of a culture of ever-decreasing time-frames and ever-increasing obligations. Lack of time and complexity of choice drive the growth of products and services in each of these areas (May, 2000).

In view of the exponential growth of online sales, more and more organizations are adopting e-commerce strategy within the organizations to improve their business process and take advantage of the World Wide Web as an alternative low cost distribution channel of goods and services.

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