

The Positive Environment Impact

E-business is a new revolution where initiative is needed to fully utilize the capabilities of Internet technology in a specific business setting. Such an initiative has built the fundamental strengths of the organization that creates a huge competitive advantage among the competitors in the market. In this paper, a method is presented for the development of an e-business which is based on the research of value creation, reward or creating promotions for customers to build a strong trust between company and customers, and also knowledge management. The proposed method is designed to help clarify a strategic e-business vision and to solicit management commitment to change and take action on new business opportunities. In addition, it also impacts the environment positively through the societal world demand of moving rapidly in the direction of valuing low-pollution and energy-efficient products.

Keywords: E-business, strategies, positive environment impact.

I. Introduction

For the sake of finding it increasingly difficult to create a differential advantage among other competitors, retailers spend millions of dollars each year on designing, building, and refurbishing stores [Baker, Levy, Grewal, 1992] [3]. According to Tiwari and Singh (2011), instead of large investments on designing, building, and so on, retailers also utilize the capabilities of internet technology and focus on developing efficient methods and practices which increases productivity in minimum efforts and cost [12]. Companies typically choose to focus on an improvement strategy that is less risky and extends or renews their existing strategy [Pateli&Gaiaglis, 2005] [16]. The new method, followed by the innovation of the technology trends that company uses is E-business. Pateli&Giaglis (2003) state that the accelerating growth of Information and Communication Technology (ICT) has raised the interest for transforming traditional business models or developing new ones, that better exploit the opportunities, enabled by technological innovation [15]. E-business creates new opportunities for companies that are willing to adapt - transforming the traditional market channels to a virtual market [13]. Kalakota and Robinson (2000) claim that old business models are morphing to a new direction; information is replacing inventory; and digital products are replacing physical goods. E-business has radically changed the way the majority of people shop, or the way most businesses are conducted on a day-to-day basis [Coltman; Devinney; Latukefu; Midgley, 2001] [6]. Strategies such as value creation, trust & e-loyalty and knowledge management in E-business are part of the development of a company to increase their productivity and profitability. In addition, the positive environment impacts also presented in E-business aims to develop a caring environment, discarding unethical use of sensitive material, unethical behaviors, superficial codes of conduct and ethic of care [Lee, 2008] [12].

2. Value creation

Organization strategy becomes a conscious plan to align the firm with opportunities and threats posed by its environment [Ansoff, 1965 as cited in Currie, 2004] [7]. With the dramatic developments of technology, especially in the area of information technology (IT), companies typically improving their business through virtual markets instead of traditional businesses. Virtual markets refer to settings in which business transactions are conducted via open networks based on the fixed and wireless Internet infrastructure. On electronic markets, firms can create value for customers in a manner that is different from that, which has been achieved in a conventional business [Han and Han, 2001 as cited in Anckar and D'incau, 2002] [2]. E-business has the potential of generating tremendous new wealth, mostly through entrepreneurial start-ups and corporate ventures. According to Amit and Zott (2001), value creation is potentially embedded in virtual markets, and explores the sources of value creation in the received entrepreneurship and strategic management literatures [1]. There are four primary and interrelated value drivers of e-businesses: efficiency, complementarities, lock-in, and novelty [Christensen & Methlie, 2003] [5]. The terms 'source of value creation' and 'value driver' are referred to any factors that enhance the total value created by an e-business, where the value is the sum of all values that can be appropriated by the participants in e-business transactions. The four primary and interrelated value drivers are the key aspects of the e-business model that play an important role of influencing e-business value directly and significantly. According to figure 1, a framework of value drivers are adopted in e-business, that are developed by Amit and Zott (2001) as cited in Christensen and Methlie (2003) [5].

Efficiency is the first category of value drivers. Low transaction costs and improved market efficiencies are the new transaction mechanisms in the market. The delivery times, either resources from suppliers and partners upstream, or finished goods to customers downstream affects the efficiency gains. The other efficiency gains is the disintegration of the value chain, for example, with more business activities outsourced, the organization is able to take advantage of the economics of scale in production, or eliminating intermediaries in the delivery channels.

Customers have more convenience and lower transaction costs, due to the horizontal integration of products, services and information based on complementary components. According to Christensen and Methlie (2003), "complementarity values may occur in channel options in which customers for instance are given the possibility of browsing through product catalogs online, and buy offline" (p.31) [5]. Besides that, horizontal integration exists on the demand side, by creating virtual communities of customers, which may influence the demand externalities.

Christensen and Methlie (2003) also added that opportunities for new types of interactions and relationships have been created by the communication in electronic networks [5]. Customer retention plays an important role on value drivers. Both sellers and buyers enabled to play new roles, to collect, and store information of each other.

Customers will shop more for the best buy goods, due to the lower search costs on the Internet. Although long-term customer relationships are difficult to build on the Internet, but it will still offer other opportunities for relationship building. There are few example of relationship building, which includes “personalized web sites, customized products based on stored profiles, proactive customer support through all phases of the product life cycle, and also through branding and trust building” [Christensen and Methlie, 2003, p.31] [5].

According to Hitt; Ireland; Camp and Sexton (2001), innovation is the most important component of a firm’s strategy; the successful innovation allows a company to provide directions for the evolution of an industry [10]. These innovations include the development of new products and services, promotion strategies, new production processes as well as new transaction exchange mechanisms. Innovation is the category of value drivers which corresponds to the novelty concept of Amit and Zott (2011) as cited by Christensen and Methlie (2003) [5]. Figure 2 has shown the e-business value hierarchy, which based on the unique characteristics of the internet and how these characteristics enable value creation via e-business and, at last impact the company performance [23].

3. E-loyalty and build strong trust

Loyalty is an economic necessity; customers may sticks around on the specific products and make lots of repeated purchases over the years. According to Reichheld and Scheffer (2000), they also know that loyalty is a competitive necessity; some companies will figure a way to harness the potential of the Web and create exceptional value for customers, in order to gain profitable relationships at the expense of slow-footed rivals [18]. A best-designed e-business model will not be successful without the strategy of loyalty. Developing trust between company and customers is the primary step of gain the loyalty of customers. “Trust makes an implicit contribution to the e-business’ success” [Srinivasan, 2004, p.67] [21]. People usually trust a business based on a personal past experience as well as by third party recommendations; trust is difficult to measure and needs to be developed over time. Srinivasan (2004) added that a few factors are generated which significantly contributes for enhancing transaction trust, such as “easy access to description of products and services, ease of placing orders, order confirmation, order tracking and also post-sales service” (p.68) [21].

A tree-structured design of the organization’s products and services will enable easy navigation for the customer. There are numerous tools available for Web design, to make the site attractive and easy to navigate. Taking advantage of database tools, an organization can easily bring to the Web real time data such as quantity on hand. Organizations such as Amazon.com have contributed significantly to the growth of software that makes placing orders a breeze. Today there are several third party vendors who provide the Web cart facility. The Web cart virtually parallels the practice in the BAM world of product ordering.

Order confirmation is another integral part of replicating the BAM world practice in e-business. This also enables the customer to see what exactly has been ordered. Technology today can easily facilitate the order confirmation. The most common way this is handled today is via email. Since shipping takes place via an independent carrier, order-tracking information usually comes later. This is not a drawback as long as the order tracking information is linked to the order history. The best thing about the order tracking aspect is that the shipper handles this aspect fully. In order to achieve success in building trust, the organization should partner with the shipper in sharing information.

Post-sales service is a key component in earning customer loyalty and trust. In e-business, the customer is most likely to be separated by distance from the merchant and at the same time has access to the merchant's Web site around the clock. This is the time asymmetry forces an e-business to rely on its information systems to facilitate post-sales service such as return of merchandise. Any bottleneck in this aspect will be a major factor in losing trust.

Besides the four factors for enhancing transactions trust, Bryant and Colledge (2002) also claim that trust generated between "business and customer, on-line accounts might be created, incentives offered, or valued clients might be given the opportunity to share information" (p.37) [4]. For example, Tesco Direct enables customers to save their shopping lists and from this enable shoppers to analyze their pattern of past purchases. Other approaches include registration as a frequent user that may provide further incentives such as special offers or access to information. "What is being fostered here is customer loyalty based on trust mechanisms" [Varian, 1999 as cited in Bryant and Colledge, 2002, p.38] [4]. Amazon enables customers to place book reviews on their site and facilitate discussion forums on related topics. Other than that, "firms have unilaterally articulated their policies regarding protection of consumer privacy and security of monetary transactions through their Websites" [Schoder and Yin, 2000, p.77] [20]. Secure socket layer (SSL) and secure electronic transaction (SET) are the two tools that are available to enhance the security on the Internet. According to Papazoglou (2001), "e-business communications that guarded by agents will provide the security services required to conduct an e-business" (p.77) [14]. Agents can collect commercial data from trusted and controlled sources. According to Rust and Kannan (2003), the security and privacy that a company effectively manages builds strong trust for its customers and contributes to their lifetime value [19].

4. Knowledge management

According to Gold; Malhotra and Segars (2001), the company must "leverage their existing knowledge and create new knowledge that (poses) favorably positions (for) them in their chosen market" to achieve higher efficiency (p.186) [9]. Although technologies are advancing and companies have investment large quantity in such technologies, some companies are still looking for the most effective ways to capture, store, and transfer knowledge and also how to ensure that knowledge workers share their knowledge. Innovation and creativity are needed for the renewal of archived

knowledge or its creation. These innovative applications of knowledge in new products and services build market share. Malhotra (2000) illustrated that “the context of enabling E-business strategy, the proposed conceptualization of knowledge management” is depicted in figure 3 (p.11) [13]. To achieve high levels of efficiency and effective organization, knowledge management indicates a highly visible presence in the efforts of firms to create and sustain winning strategies [Fahey, Srivastava & Sharon, 2001] [8]. Knowledge management reflects a company’s process that seek a collaborative combination of data and information processing capacity of information technologies, and the creation and innovation capacity of human beings. Due to the rapid advancing of technologies, there are multiple choices in terms of technologies like customer relationship management (CRM) and supply chain management (SCM) that could precipitate specific e-business strategy. However, a “company (is) still able to mesh the evolving business model with technological and structural changes on an ongoing basis will put a premium on creativity and innovation” [Malhotra, 2000, p.12] [13]. The strategic distinction between knowledge and information is relevant to the key emphasis on performance and outcomes of a company.

5. Positive environment impact

With the demand of valuing low-pollution and energy-efficient products, companies are using innovation to command price premiums for “green” products and open up new market segments [Porter and Class, 1995] [17]. E-ethical leadership was defined for the virtual project teams; run their e-business with ethics for the sake of developing a caring environment to decrease the pollution in the society. Lee (2008) stated that virtual teams reflected the ever-increasing non-traditional work environments of the 21st century [12]. E-business is the correlative activity among companies and suppliers which is defined as the conceptual model of environmental implications. Its consists of company layer and effect layer, where the company layer has Intranet and Extranet view while effect layer contains three effects, which includes primary effects, secondary effects, and tertiary effects. There are few various infrastructures that cause the primary effect, communication infrastructures, computer infrastructures and Internet infrastructures. “Secondary effects come from diversified applications as shown in warehousing inventories, transportation, packaging, and so on” [Tiwari and Singh, 2011, p.203] [22]. Besides that, the adjustment of the new habits, consumption pattern, and so on refer to the tertiary effects.

On the primary effects, Internet helps to reduce the building energy intensity. “It also encourages sharing of infrastructure like equipment, networks etc. companies providing online movie centers, online advisory agencies, online billing systems do not need physical locations” [Tiwari and Singh, 2011, p.203] [22]. Thus Internet can help to prevent the release of greenhouse gases in the world.

Peng, Li² and Zhang (2005) as cited in Tiwari and Singh (2011) illustrated that secondary effects is helpful for many organizations to improve their communication whether internal or external:

Internal departments of the traditional companies, when apply advanced information technologies then it becomes highly efficient with tight collaboration, well communication and fast response. Companies grow very fast by moving many of its operations to the Internet. Many organizations are now using the Internet to improve communication between companies; and its departments. It allows the company to better utilize its existing manufacturing capacity for large investments without making any kind of additional investments. In e-business, companies may experience larger numbers of orders with smaller size than experienced in the conventional purchasing system, and this means a new perspective on the packaging issue: durable and reusable packaging sources are needed. (p.203) [22]

On the tertiary effect, the innovation from traditional business to e-business has influenced how people search, read, write, and access information or material online in intra-company systems or inter-company systems. It changes some individuals' habits and avoids the use of paper and thus, reduces paper consumption. Less paper resources is used as more people use digital communication to send bills, pay bills, and also to place orders. A paperless office or paper less society has been generated in e-business. Hence, e-business has concluded that ability to support a green environment through the reduced use of paper.

6. Discussion

E-business is the new revolution for a company not only for the sake of creating a competitive advantage among other competitors, but also to increase their total sale and productivity. The rapid growth of technology has influenced the way firms conduct their business online, no matter whether it is selling products or services. Creating value for each customer and also building stronger trust between customers and companies, such as improving the security systems and privacy, rewarding customers based on the amount they purchase or their consistent purchase of the products every month, giving discount or promotion to customers so that customers will purchase large amounts of their products. In addition, the leverage company's existing knowledge and creation of new knowledge favorably positions them in their chosen market to achieve higher efficiency is also very important to develop a successful company. E-business is a good way to deal gain business from customers who spend much time on the Internet. E-business also impacts the environment positively as compared to old traditional businesses that spend large amounts of investments to generate their business transactions like building and designing. This paperless solution; E-business helps to conquer the problems of deforestation and is the environmental cure for the damages caused by traditional businesses through the rapid clearing of land to build cities. With a growing number of literate people in the world, E-business is the answer especially when more and more people need to send and pay bills, as well as place orders.

7. Conclusion

In the nutshell, e-business brings a lot of benefit to a company, such as increasing the demand of the product and productivity that will automatically increase the profitability of their business; well development in the e-business may lead a company to success. Creating value, building strong trust and rewarding customers would ensure customer's loyalty to the specific product. Creating new knowledge to achieve high level of efficiency and effective organization, knowledge management indicates a highly visible presence in the efforts of firms to create and sustain winning strategies. Knowledge management reflects on a company's processes that seeks collaborative combination of data and information processing capacity of information technologies, and the creation and innovation capacity of human being. Lastly, e-business also impacts the environment by helping to decrease pollution, excessive building developments and increasing a paperless society. This may create a large awareness of caring our environment to people who ever want to spent large amount on investment such as building more shops or factories.