THE IMPACT OF ELECTRONIC COMMERCE ON BUSINESS-LEVEL STRATEGIES

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ABSTRACT

This paper examines the impact of electronic commerce on business-level strategies. The paper examines electronic commerce (E.C) from the perspective of intra-business E.C., business-to-business E.C., business-to-consumer E.C., and value/supply chain management. Business-level strategies are considered to include: added-value, differentiation, cost leadership, focus, and growth source. The paper concludes that E-commerce will have significant impacts on each of the business-level strategic areas.

1. Introduction

The proliferation of electronic commerce throughout business organizations is having profound effects on business strategies. "The rules of competition are being re-written and redefined as the technological revolution continues, particularly in the area of world-wide commerce."[1] Projections of commerce via the internet are remarkable. According to Forrester Research, online sales should reach $300 billion in 2000 and $488 billion in 2002. Likewise, business-to-business commerce is projected to reach $327 billion by 2002.[2]

"Electronic commerce has evolved from a high-tech marvel to a corporate initiative."[3] Electronic commerce can no longer be ignored or thought of only as an I.T. project. Electronic commerce projects must now be intertwined with the firm's strategic plans. The most notable strategic effects at the business-unit level: are value-added, differentiation, cost leadership, focus, and business growth strategies. This paper examines the effects -- emerging and potential -- of electronic commerce on these types of strategies.

2. Electronic Commerce

For many businesses, electronic commerce means using the Internet as a distribution channel to market and sell goods and services to the consumer. This narrow definition really defines only *Internet* commerce. *Electronic* commerce is much broader in what it encompasses. According to Malcolm Frank, V. P. Marketing, Cambridge Technology Partners, electronic commerce is the electronic exchange of information, goods, services, and payments and includes the creation and maintenance of Web-based relations.[4] Therefore, E.C. includes, but is not limited to, the Internet, intranets, extranets, electronic data interchange (EDI), and others. Examples of electronic commerce include transaction processing with electronic payment, coordination with business partners such as inventory management, customer self-service such as tracking order status and researching problem resolution, and using a corporate intranet for ubiquitous information distribution.

This paper focuses on four major areas of electronic commerce (E.C.). They are: Intra-business E.C., Business-to-Business E.C., Business-to-Consumer E.C., and electronic commerce applications within the value chain, including the supply chain and the demand chain. Intra-business E.C. refers to electronic commerce applications internal to the organization and the transforming effects the Internet is having on the business.

[1] Applegate, McFarlan, McKenney, Corporate Information Systems Management: Text and Cases, IRWIN, 1996, 4th ed., p. 155.
[2] "B-to-B Net Transactions Projected at $327 Billion in 2002", www.internetnews.com/ec-news/, 7/14/98.
[3] IEC Conference Brochure, February, 1999.
[4] Frank, Malcolm, "The Realities of Web Based Electronic Commerce", Strategy & Leadership, May/June 1997, p. 32.

Business-to-business E.C. includes transactions between businesses, as well as the trend toward extended enterprises and integrated businesses. It also includes the sharing of data and information access through extranets. Business-to-business E.C. supports interorganizational systems (IOS). "IOSs are networked computers that enable companies to share information and information processing across organizational boundaries."[5] IOS applications encompass many areas such as: bar coding, electronic forms, ordering goods and electronic funds transfers. Business-to-consumer E.C. looks at web consumer commerce and consumer electronic marketplaces. Value chain and supply chain management strategies address issues affecting how companies create value and implement supply chain management through Internet technologies. VC/SMC strategies build upon intra-business E.C., business-to-business E.C., and business-to-consumer E.C. It can include vertical integration or expanding the VC/SCM either by getting closer to the customer or by getting closer to the supplier. Partnerships are developed from linkages in the distribution channel using electronic commerce. Interorganizational Systems and EDI provide avenues to do this. Each of these electronic commerce areas directly affects business strategies.

Table 1 (See Appendix), Strategic Effects of Major Types of Electronic Commerce, presents an overview of the effects on business-unit strategies. Business unit, or business-level, strategies address "how should we compete?", in contrast to enterprise, corporate, or functional strategies. Business-level strategic areas are organized as Added Value, Differentiation, Cost Leadership, Focus, and Growth Source. The Added Value section analyzes "What value does each type of E-Commerce add?" Generic strategies such as Differentiation, Cost Leadership, and Focus are all affected by E-commerce. Many businesses' strategies are looking to electronic commerce as their "growth engine". The answer to the question, "How can electronic commerce provide growth for the organization?" is outlined in the Growth Source section.

3. Intra-Business

3.1 Added Value

Electronic commerce technologies are affecting the way organizations are creating value both internally and externally. Within the organization, increased information access and improved communications using e-mail, pointcasting, etc. on the corporate intranet are evidence of this happening. "Its (The Internet's) immediate potential may lie more in its impact on communication within, rather than outside of, the company. The surging popularity of 'intranets' -- secured Internet lines that carry internal corporate communications -- implies a fascinating flip side to the cyberspace phenomenon: the Internet is not only altering the way companies manage I.T. I.T. is also having an impact on the way companies are managed."[6]

Companies' communications and information flow are enhanced from easily obtaining information about industry statistics, new vendors, or the competition via the Internet. "E-mail plays a large part in improving a company's regular operations. Previously, a graphics company might design artwork for customers, paying to print and then send the mockups to the client. Now, the company can send the same files as e-mail attachments so the recipients can easily print them. This saves expense and time for both parties."[7]

3.2 Differentiation

Businesses are using electronic commerce to implement mass customization strategies, producing large numbers (mass) of customized items, to differentiate their products and services. Existing products can be customized in innovative ways. For example, one business creates customized compact disks. Customers purchase compact disks that are tailored according to the their music selections. (www.musicmaker.com)

3.3 Cost Leadership

Electronic commerce decreases distribution costs through a reduction in overhead such as: inventory, retail space, and personnel. In addition, the inefficiencies associated with paper processing are decreased or eliminated. "The main impact of the growth of e-commerce will be on reducing costs for the consumers or purchasers. 'E-commerce takes away a great deal of the cost. Having a store and inventory are things companies don't want.' These costs should be passed down to the purchasers."[8]

In addition to lower distribution costs, information flows are simplified or redefined that result in further cost savings. These cost reductions increase the bottom-line for businesses and allow them to invest in other growth opportunities. From a strategic perspective, this plays a significant role in strategic planning.

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[5] Kaufman, Felix, "Data Systems that Cross Company Boundaries," Harvard Business Review, January-February, 1996.
[6] Griffith, Victoria,"Making Information Technology Strategic", Strategy & Business, Fourth Quarter, 1997, p. 84.
[7] Van Winkle, "Intro to E-commerce", Smart Computing, February, 1999, p. 47.
[8] Lucas, Allison, "What in the World is Electronic Commerce?", SMT, June 1996, p. 28.

3.4 Focus

Using Ansoff's model[9] of Strategies for Increasing Scope, electronic commerce affects the ability for a business to increase its scope and extend its core mission through market penetration, market development, product development, or business development strategies.

3.5 Market Penetration

The novelty and ease of purchasing a product or service via the Internet is a natural progression to increased market penetration. Firms that have the foresight and expertise to be the first to implement internet commerce technology that supports their product marketing and distribution will be in the driver's seat. However, quickly the window of opportunity for new entrants is quickly closing and the strategic advantage is diminishing. An example, of a business successfully experiencing strong market penetration is Amazon.com. They were one of the first, if not the first, full-service online book ordering dot-com business. Because of their innovativeness and early entrance, they have a strategic advantage.

3.6 Market Development

The Internet is having significant effects on market development strategies. "Market development strategies are attempts to promote existing products in new markets, in effect broadening the scope of the business by finding new market segments or new channels."[10] Businesses have an opportunity with minimal investment to have a global presence….almost overnight! It is not uncommon for a small business to build (in a matter of days) a storefront and within hours after implementation have international customers.

Electronic commerce enables businesses to quickly and effectively implement geographical expansion growth strategies. "Geographical expansion is actually a form of market development which takes an existing product line to new geographical areas."[11] These geographical expansions may be domestic, international, or worldwide. Internet commerce gives businesses from all over the world access to new markets.

Some businesses will benefit more from an electronic commerce strategy than others. *Internet* commerce strategies benefit businesses that have a product or service that are not unique to a specific locale and want to grow their business beyond a local market the most. *Electronic* commerce is an excellent strategic move for businesses that have modest or substantial volume and interact with buyers and suppliers directly.

According to a study by the Applied Information Management Institute (AIM) of Omaha, businesses that are larger (136 employees on average) and operated from multiple sites had more successful web sites. "Market reach, however, appears to be more significant in determining effective use of web technology than does size and number of operating sites."[12] In addition, a web presence opens the door to new markets and new distribution channels. Technically-savvy consumers will seek out information about products and services using the Internet. Those that feel comfortable using credit cards or e-cash for electronic purchases will change their buying habits to this mode and prefer businesses that support electronic transactions.

Internet users experience levels are rapidly increasing. Likewise, a web presence will even have a positive effect on inexperienced Internet users. Those Internet users that are skeptical of buying directly over the 'net because of perceived security and privacy concerns will still use the Internet to research what and where they want to purchase products or services. After successfully researching their options, they will use more conventional methods to complete the transaction. Thus, how easy- to-use and effective the web site is will determine if the business closes the transaction or if the consumer selects the competition.

Opening a new distribution channel using the Internet can lead to new market segments being served. Further, the new distribution method and/or market segment may shift a product that is in the maturity or decline phase of the product life cycle back into the "growth" phase. A product in the growth stage of its life cycle is in an advantageous position. "The product life-cycle curve shows that it is relatively easy to grow during the 'growth' stage (although increasing market share may not be as easy), and that growth and share increases are much more difficult to achieve in the maturity and decline phases. [13]

3.7 Growth Source

Electronic commerce is affecting the way business strategists are planning growth strategies and is the leading driver of corporate growth. Information technology is continuing to be an integral part of the business plan and within I.T., electronic commerce is the number one initiative. In order for this change to be embraced, "it is

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[9] H. Igor Ansoff, *Corporate Strategy*, (New York, NY: McGraw-Hill, 1965).
[10] Digman, Lester, Strategic Management: Concepts, Processes, Decisions, Dame Publications, 1999, p. 13-21.
[11] Digman, Lester, Strategic Management: Concepts, Processes, Decisions, Dame Publications, 1999, p. 13-21.
[12] Sweeney Robert, "Nebraska Business Link Small Business Use of Internet Study", AIM Institute, August, 1997.
[13] Digman, Lester, Strategic Management: Concepts, Processes, Decisions, Dame Publications, 1999, pp. 11-26.

essential to alter the way in which information technology is viewed within the organization. The key is for I. T. to be seen as the new engine for growth, and not as a frustrating cost center that few executives understand."[14] This results in a new way of thinking: "The focus should be not on how much new technology should cost, but on how much revenue it will bring in."[15]

John McKinley, CIO at GE Capital Services, is using electronic commerce to grow the customer base of GE's 27 diversified businesses. "Since joining GE Capital in 1995, the company has launched an average of one electronic project every six weeks."[16]

Another *Fortune* 100 company, 3M, with a history of innovation, is embarking on a full- scale electronic commerce strategy. Today, 3M is tying innovation with electronic commerce with the hopes to ensure company growth. "The company is pushing three key initiatives to drive growth: accelerate new product development and commercialization, encourage supply chain excellence, and build customer loyalty. Recognizing E. C. (electronic commerce) technology's potential for advancing the latter two business strategies, Staff Vice President for IT, David Drew and his IS staff have elevated E.C. to a top-three priority on the IT docket."[17]

Electronic commerce enables businesses to quickly and efficiently implement growth strategies. One of the main reasons this strategy is so attractive is the incredible growth rate of Internet users. "The rate of adoption of the Internet continues to increase. During the year 2000, "there will be over 300 million active Internet users worldwide and 380,000 companies online."[18]

The potential revenue stream from electronic commerce is affecting reinvestment strategy decisions. To propel Disney anew, CEO Michael Eisner is "investing aggressively in what he describes as an inside-outside strategy. He wants to keep luring people out of their homes to see Disney's movies and visit its theme parks, while giving them an increasing number of products to entertain and inform themselves when they do stay home."[19] Disney pursued this strategy in its recent acquisition of 43% of Infoseek Corp. Disney and Infoseek are in the process of launching a new Internet portal that they hope will become a prominent Web destination rival.

Information portals or web portals are a "cyber door" on the Web; they serve as a customizable home base from which users do their searching, navigating, and other Web-based activity.[20] Inviting and information-rich portals develop a relationship with customers. This relationship increases the likelihood of sales and opportunities to introduce new products and services.

4. Business-to-Business

4.1 Added Value

Electronic commerce is a natural way for business to create value by aligning themselves with their customers, suppliers, employees and many others. Types of business-to-business electronic commerce applications include: electronic data interchange, electronic funds transfer, electronic forms, integrated messaging, and shared databases. Business-to-business processes provide sharing of data and increased information access through corporate extranets.

Bugle Boy has a strong value-added electronic commerce strategy. They provide support to the retailers involved in their business-to-business partnerships. Through Bugle Boy's extranet they allow retailers to order online and see the status of inventory and shipments. It supplements their EDI and partner-managed inventory efforts.[21] "The power of e-commerce comes from a buyer and seller being able to conduct the full range of a business relationship online. From creating the initial impression, allowing for competitive comparison, to negotiation, to closing the sale to delivery of the product, and finally to customer service."[22] If this happens the powerful opportunity e-commerce brings will begin to happen.

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[14] Griffith, Victoria,"Making Information Technology Strategic", Strategy & Business, Fourth Quarter, 1997, p. 80.
[15] Griffith, Victoria,"Making Information Technology Strategic", Strategy & Business, Fourth Quarter, 1997, p. 82.
[16] Hoffman. Thomas, "Keys to success: Keep GE customers coming back", Computer World, May 19, 1997, p. 59.
[17] Slater, Derek, "Sticking with Strategy, CIO, January 1, 1997, p. 82.
[18] Malcom, Frank, "The Realities of Web Based Electronic Commerce", Strategy & Leadership, May/June 1997, p. 32.
[19] Orwall, Bruce, "Disney Cuts Costs, Plans Growth in Cybershpace", Wall Street Journal, September 24, 1998, p. B1.
[20] Schneider, Gary P., Perry, James T., *Electronic Commerce*, Course Technology, Cambridge, MA, 2000, p. 97.
[21] "www.apparel.sales Trying on the Web for size", Journal Store News, April 14, 1997, p. A31.
[22] Lucas, Allison. "What in the World is Electronic Commerce?", June, 1996, p. 26.

4.2 Differentiation

Electronic commerce differentiates products and services through integrated business strategies. For example, "Successful high-tech companies will connect their internal research and development to their suppliers' R&D labs for concurrent engineering. Not only will these companies electronically share data with the suppliers, but also the products they develop will be e-commerce-enabled. Products will be built to feed data back to the manufacturer on a variety of parameters, including performance, maintenance needs and usage. With this information, the companies will have a jump on competitors in the design of the next-generation products." [23]

4.3 Cost Leadership

Strong business-to-business alliances can be established in the procurement process complementing a cost leadership strategy. For example, sharing information and electronically processing business transactions can improve the buyer-supplier relationship by allowing the buyer:

- to use automated search tools to identify the exact product or products they are seeking.
- to obtain accurate, customer-specific pricing
- to check product availability
- to review total order costs, including tax and shipping expenses
- to order with the click of a button
- to choose from a number of payment methods
- to track the status of an order until it is delivered.[24]

4.4 Focus

Electronic commerce in many cases can radically change the balance of power in buyer-supplier relationships, raise barriers to entry and exit, and shift the competitive position of industry participants. Barriers such as: technology, regulatory, economic, social and structural are shifting. As businesses understand how each of these areas relates to electronic commerce and their industry, the barriers will be less of an obstacle. Those businesses that can get around these barriers early will have a real advantage over their competitors. "Engaging in electronic commerce requires rethinking the very nature of the buyer/seller relationship. It requires the fundamental transformation of business, because all or most human interaction and paper-based processes within the value chain will need to be changed."[25]

A variation of product/service development is a preemptive strategy. A preemptive strategy is one "that attempts to disrupt the 'normal' course of industry events and in the process change the rules--to create new industry conditions to the disadvantage of the competition."[26] A preemptive strategy may be possible if competitors are farther behind technologically.

"Electronic commerce can in effect provide an opportunity to vertically integrate without ownership - thereby gaining control over a channel intermediary or supplier. Furthermore, in some cases the intermediary may be completely bypassed and the organization directly links to the end customer. This direct linkage may result in simplified product complexity, enhanced market penetration, and expanded opportunities to create buyer-seller partnerships. These partnerships cause barriers to entry and exit."[27]

By developing close supplier and/or buyer relationships, it could disrupt the, normal" course of industry events and ultimately change the rules. If the business is in the driver seat of changing the environment (and changing the rules), the competitor will definitely be at a disadvantage.

A phenomenon that is happening more and more is a "blurring of industries". For example, banks are offering brokerage services and some upstart Internet brokerage firms are offering banking services. In addition, some insurance companies are now offering brokerage services.

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[23] Curtis, Christine, "E-commerce among businesses can improve the bottom line, Communications Week, March 3, 1997, p. 37.

[24] Ghosh, Shikhar, "Selling on the Internet: Achieving Competitive Advantage and Market Lead", Strategy & Leadership, May/June, 1997.

[25] Lipoff,Stuart, Jens, Janice,"Ten Steps to Success in Electronic Commerce", Telecommunications, June, 1996. p.45.

[26] Digman, Lester, Strategic Management: Concepts, Processes, Decisions, Dame Publications, 1999, pp. 13-18.

[27] Applegate, McFarlan, McKenney, Corporate Information Systems Management: Text and Cases, IRWIN, 1996, 4th ed., p. 165.

Amazon.com is an example of how an upstart business can redefine its whole industry. It is causing its competitors to rethink whether their traditional advantages -- physical size, mass-media branding and even the sensory appeal of shopping in stores -- will be enough to thrive in a technology revolutionized economy. [28]

Thus, electronic commerce can strategically shift the forces driving industry competition. Businesses immersed in business-to-business partnerships enjoy stronger bargaining power and industry control. Barriers to entry change as a result of doing business using Internet commerce.

"The window of opportunity for Internet startups to get in before the big guys is closed in most cases," Delhagen said. "There's a difference these days from the heady days. The cost of entry is getting higher by the week, and the venture-capital firms are more rigorous about their funding decisions."[29]

4.5 Growth Source

An alternative for providing growth is expanding into an existing business through vertical integration, expanding the value chain either by getting closer to the customer or by getting closer to the suppliers. Mergers and acquisitions can facilitate this process. Business-to-business relationships are designed as being "complementors". "A complementor is the opposite of a competitor. It is someone who makes your products and services more, rather than less valuable."[30] Partnerships are being developed from linkages in the distribution channel using electronic commerce. Interorganizational Systems and EDI provide avenues to do this.

5. Business-to-Consumer

5.1 Added Value

Internet commerce is affecting the way in which businesses are enriching their products and services. An example, of adding value to retailing online, is to create a total experience around a lifestyle, much like the image merchants create with boutiques on a retail selling floor. "Market to skiers by telling them about places to visit, snow conditions, equipment and apparel. If you sell prom dresses, create a major event online. Give visitors tips on where to find limos, fun activities to do after the prom and etiquette. Selling a product straight up without differentiating is difficult."[31]

Another recent example is www.WeddingChannel.com. This dot.com business provides information and services for the bride-to-be and her fiancée. In addition, it assists their guests in selecting and purchasing a gift, and travel reservations. These added-value features promote building a relationship with the consumer.

"A company needs to add value to its product when using electronic commerce or it isn't a strategic move and will not provide the competitive advantage anticipated. "Dyson points to the FedEx site [http-[www.fedex.com] as one that adds value ---- it lets customers get in touch with the company's service reps, and to not only give feedback, but track orders as well."[32]

5.2 Differentiation

Strategists at Amazon.com have the differentiation strategy down to a science. "By pioneering -- and damn near perfecting -- the art of selling online, Amazon is redefining retailing."[33] Amazon.com, allows consumers to read short excerpts from books before they make their purchases. In addition to this benefit, consumers on average receive a 30 percent discount and all from the convenience of their home. Amazon.com is differentiating their service by using "intelligent information". They are tailoring their service to each customer by developing a profile of that customer and then suggesting books and communicating other information of interest to the customer. This is possible by searching for other customers with similar profiles and reviewing their purchasing habits, etc. "Amazon's changing the business model of retailing", says Ann Winblad, a principal at Hummer Winblad Venture Partners."[34]

One of Microsoft's Internet applications gives customers the ability to troubleshoot their technical problems and an avenue to "self-service". These customer support functions differentiate Microsoft's products and services. 5.3 Cost Leadership

[28] Hof, Robert D., "Amazon.com", Business Week, December 14, 1998. p. 106
[29] Moore, John,"Year of the Internet stocks", www.CNN.com, 12/31/98.
[30] Brandenburger, Adam, Nalebuff, Barry, "The Added-Value Theory of Business", Strategy and Business, Fourth Quarter, 1997, p.5.
[31] "www.apparel.sales Trying on the Web for size", Journal Store News, April 14, 1997, p. A31.
[32] Lucas, Allison, "What in the World is Electronic Commerce?", SMT, June 1996, p. 28.
[33] Hof, Robert D., "Amazon.com", Business Week, December 14, 1998, p. 107.
[34] Hof, Robert D., "amazon.com", Business Week, December 14, 1998, P. 110.

Direct contact with the customer has the potential to cut costs significantly by reengineering the selling and distribution process and eliminating a number of activities. There are several retail industries (toys, drugs, grocery, etc.) that have moved to an internet-based business. This enables them to have low-cost direct contact with their customers and build relationships. The selling and distribution process has been completely overhauled. These changes provide further opportunities to implement cost leadership strategies.

5.4 Focus

Businesses can target the consumer through "e-tailing". Some businesses will use this new marketing channel to compliment their existing channels, where as, others will sell their products or services only on the Internet. Regardless, of the strategy, they can gain competitive advantage by narrowing the competitive scope of the business to specific segments. Many e-tailing enterprises are using intelligent agents. These intelligent agents tailor information, services and product offerings for each customer.

5.5 Growth Source

Electronic commerce on the Internet creates new marketplaces. Electronic markets support seller and buyer negotiations using a bidding process. Once a contract is agreed upon it can be executed on or offline. These online electronic marketplaces are increasing price competition and creating avenues for entrepreneurial business growth. In some cases, this is also causing reintermediation where new electronic intermediaries are emerging such as e-malls and product selection agents.

6. Value Chain/Supply Chain Management

6.1 Value Added

Doneger's corporate strategists recognize the value of business-to-business relationships among the value chain. At Doneger, they help retailers set up Web pages. "They want to allow consumers to see manufacturers' products, have them type in their zip code or area code and immediately get a list of Doneger stores in their market that carry the items."[35]

"If the services of a broker, representative, or distributor do not add value, firms will seek to bypass them to eliminate costs, delays, and other inefficiencies. Largely for this reason, a growing number of firms are attempting to deal directly with manufacturers, passing along saving to customers in the form of lower prices. Electronic markets facilitate bypass if they enable firms to deal directly with actual and potential customers."[36]

6.2 Differentiation

Internet commerce is causing businesses to rethink how their products and/or services can be enhanced through a web-page differentiation strategy. "Through an information partnership, diverse companies can offer novel incentives and services or participate in joint marketing programs. They can take advantage of new distribution channels and introduce operational efficiencies and revenue enhancements. Partnerships expand scale and cross selling. They can make small companies look, feel and act big as they reach for customers once beyond their grasp. They can make big companies look small and close as they target and service custom markets. Information-enabled partnerships, in short, provide a new basis for differentiation. Many more of them will be appearing in the coming decade."[37]

6.3 Cost Leadership

"By opening up the lines of communication, intranets facilitate the management of another 1990's phenomenon: the virtual corporation. As the distinctions fade between the corporations and its support structure -- which may include distributors, suppliers, accountants and shareholders -- it is sometimes difficult to say exactly where an organization begins and ends."[38]

Disintermeditation, where traditional intermediaries are eliminated, is affecting cost leadership. The removal of organizations or business process layers decreases the costs of products and services.

6.4 Focus

Focus strategies reflect the perspective of the seller or producer. Value chain/supply chain management e-commerce has the potential to change the power of buyer/supplier relationships.

6.5 Growth Source

[35] "www.apparel.sales Trying on the Web for size", Journal Store News, April 14, 1997, p. A31.

[36] Senn, James A., "Capitalizing on Electronic Commerce, The Role of the Internet in Electronic Markets", Information Systems Management, Summer, 1995. , p. 15.

[37] Applegate, McFarlan, McKenney, Corporate Information Systems Management: Text and Cases, IRWIN, 1996, 4th ed., p. 185.

[38] Griffith, Victoria,"Making Information Technology Strategic", Strategy & Business, Fourth Quarter, 1997, p. 84.

Old business strategy needs to think in a different ways. In physical retailing the most important thing is location, location, location. In Internet commerce, the most important thing is technology, technology, technology. "Is Amazon.com, Inc. a retailer or a technology company?: CEO Jeff Bezos' answer: 'Yes.' And he's right - it's both."[39] Businesses need to critically review the value chain/supply chain for potential growth opportunities using E. C. technology.

7. Conclusion

Paraphrasing Intel Chairman Andy Grove, in five years every company will be an E-business company, or it won't be a company at all. As Malcolm Frank of Booz-Allen has stated, "The Internet, particularly through its ability to enable electronic commerce, will rewrite the rules of entire industries. Those firms that become masters of electronic commerce will have vast new opportunities made available to them. Those that do not will quickly become irrelevant, because competing in the new millennium without electronic commerce capabilities will be similar to trying to compete today without a sales force or a telephone."[40]

This is not just another way to buy books or airline tickets, it is revolutionizing the way businesses compete. It is creating fundamental changes in the ways those businesses operate -- their functions -- and, more importantly, in the way they compete -- their business-level strategies. Doing so will require a reorientation of how management views electronic technology: it must be viewed as an engine of growth and profit rather than as a cost. It includes rethinking relationships with the firm's entire value chain, and will change not only businesses and their strategies, but industries and entire economies, as well. We are in the beginning of the Information Age -- a change that has the potential to make the Agricultural and Industrial Revolutions pale by comparison.

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[39] Hof, Robert D., "amazon.com", Business Week, December 14, 1998, P. 107.

[40] Frank, Malcolm, "The Realities of Web Based Electronic Commerce", Strategy & Leadership, May/June 1997, p. 31.

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Appendix

Strategic Effects of Major Types of Electronic Commerce
TABLE 1.

Electronic Commerce Types	Strategic Areas				
	Added Value	**Differentiation**	**Cost Leadership**	**Focus**	**Growth Source**
Intra-Business	Communication Intranets	Mass Customization	Organizational Efficiencies	Early Entrants Business Develop. Product Develop.	Profit Center vs. Cost Center Web Portals
Business to Business	Sharing Data & Information Access Extranets	Integrated Businesses	Internet Procurement	Redefining/ creating entire industries Blurring of industries Pre-emptive Strat. Revolution-izing the economy	Build Relationships Mergers Acquisitions Partnerships
Business to Consumer	Electronic Payment Order Tracking Enriched Product/Service	Intelligent Information Customer Self-Service More Efficient Probl. Resolution	Direct Contact	E-tailing - new channel	Electronic Marketplaces Re-intermediation
Value / Supply Chain Management	Communications Intranets Sharing Data & Infor. Access Extranets Procurement Inventory Mgmt. Sharing R&D Electronic Payment	Changing the face of Logistics Leveling the playing field	Virtual Enterprise Decreased Dist. Costs Disintermediation	Change the power of buyer/supplier relationships	High Velocity Enterprise