E-Commerce; an Introduction

An e-commerce solution for a business is the incorporation of all aspects of the business operation into an electronic format. Many well-established businesses have been selling on-line for years. For example, Dell Computers Corp., has been selling computers directly to end-users for years. Currently, Dell is selling excessive of 1 million dollars worth of computers everyday on the World Wide Web (WWW). When a business has incorporated an e-commerce solution, the business will experience a lower operation cost while at the same time increasing its profit. The e-commerce solution will allow businesses to eliminate unnecessary paperwork. All paperwork and data can be transformed into an electronic format. Thus, it will eliminate valuable shelf space and data can be searched and accessed in matter of seconds.

E-commerce will also automate the sales process. Customers can "point & click" on the products they wish to purchase, fill out the customer information, and the product will be shipped and received in a matter of few days. The administration department does not have to fill out any paperwork because the customer had done it already. Thus, the efficiency will be greatly improved. With an e-commerce solution, the business will be open 24 hours a day, 7 days a week. People from anywhere in the world with an Internet access will be able to visit the site at any time. They will not be restricted to the "normal" business operating hours. A "brick + mortar" business is normally limited to serving the customers in its local geographical location. With an e-commerce solution, that business will not be limited a geographical restriction, rather it opens itself to the global on-line market.

Essentially, the business' market exposure will be greatly increased. In conducting my study, I have researched extensively on the Internet for resources. I chose the Internet as my primary research medium because e-commerce is still a fairly new technology. Since it is technology related, the Internet will provide the most recent data available. Printed publications will not be able to adapt to changes as fast and efficient as electronic publications. I researched many e-commerce related web sites along with some companies that conduct statistical studies. Some of the e-commerce web sites that I

looked into are E-Commerce Times, eRetail, and eMarketer. The statistical research firms that I researched are Forrester Research and Jupiter Communication. Both firms provided valuable statistical data that shows the rise of consumers shopping on-line and the predicted dollar amount that will be spent in the coming years.

With the astonishing growth of the Internet, many companies are finding new and exciting ways to expand upon their business opportunities. There are very few successful companies that do not use computers in their everyday business activities, which also mean there are few companies that do not use e-commerce. To emphasize the point that the effect of the Internet is so widespread in today's business communities, one online article stated that more than 100000 companies have Internet addresses, and 20000 companies have home pages on the Internet as February 1999. (DataQuest, 1999). These numbers have more than tripled since 1995, and the trend shows no signs of slowing. But what exactly is e-commerce? To most casual Internet surfers, e-commerce means online shopping as pointing their web browser to Amazon.com to order an emergency present because they forgot someone's birthday again. (Weiss, 1999) As we will soon find out, this is far from the case.

Simply put, e-commerce is the exchange of business information between two or more organizations. An example of this would be buying and selling products or services over the Internet. E-commerce became very popular soon after it proved to be an efficient means to conduct long distance transactions. The purpose of this report is to discuss some of the advantages and disadvantages of e-commerce, as well as examining its potential for the future of business.

Electronic commerce or e-commerce has developed very rapidly in the last few years and has left some people wondering what it is all about. "Most people think e-commerce is just about buying and selling things over the Internet." (Wareham, 2000) E-commerce is a broad term describing the electronic exchange of business data between two or more organizations' computers. Some examples might be the electronic filing of your income

tax return, on-line services like Prodigy, and on-line billing for services or products received. E-commerce also includes buying and selling any item over the Internet, electronic fund transfer, smart cards, and all other methods of conducting business over digital networks. The primary technological goal of e-commerce is to integrate businesses, government agencies, and contractors into a single community with the ability to communicate with one another across any computer platform. (Edwards, 1998)

History of E-commerce

Electronic commerce was built on a foundation that was started more than 125 years ago with Western Union's money transfer as an example of telegraph technology. In the early 1900s the adventure of credit cards as a payment system revolutionized the process of automated commerce functions. In the mid 1980¡¦s the introduction of the ATM card was the latest improvement to electronic commerce. The Internet was conceived in 1969 when the Department of Defense began funding the research of computer networking. The Internet, as a means for commerce, did not become reality until the 1990s. Before this time, it was mainly a tool for the army, and a research device for some American universities. Its popularity grew when it proved to become a fast and efficient means to conduct long distance transactions, as well as an effective way to distribute information.

Economic Impact

Clearly, E-commerce will change the face of business forever. Companies that are thousands of miles away can complete business transactions in a matter of seconds as well as exchange information. As one online article explained: Dell Computers sells more than $14 million worth of computer equipment a day from its web-site. By taking their customer service department to the web Federal Express began saving $10,000 a day. The Internet provides businesses with the opportunity to sell their products to millions of people, 24 hours a day. (Baxton, 1999) Amount of revenues generated by the on the Internet dating back to 1996 as well as estimating possible revenues through the year 2002. With 1998, revenue equaling almost 74 billion dollars and experts predicting that it will climb to as much as 1,234 billion dollars by the year 2002; anyone can see that e-commerce   is   the   wave   of   the   future. Internet generated revenues in US dollars. (Source: NUA Internet Surveys) "Without a doubt, the Internet is ushering in an era of sweeping change that will leave no business or industry untouched. In just three years, the Net has gone from a playground for nerds into a vast communications and trading centre where some 90 million people swap information or do deals around the world. Imagine: It took radio more than 30 years to reach 60 million people and television 15 years. Never has a technology caught fire so fast."

(Edwards, 1998)

Advantages of E-commerce;

- ➢ Speed
- ➢ Savings
- ➢ International Distribution
- ➢ CustomerService

The number one advantage that e-commerce possesses is speed. The Internet and World Wide Web gives businesses opportunities to exchange messages or complete transactions almost instantaneously. Even with the slowest connections, doing business electronically is much faster than traditional modes. With increased speeds of communication, the delivery time is expedited and that makes the whole transaction from start to finish more efficient. Also, you can find practically any product available for sale on the Internet, as one author put his or her from books and compact disks (from www.amazon.com) to French bread (available from www.sourdoughbread.com) (Buskin, 1998) Even more significant is the fact that information appearing on the Internet can be changed extremely rapidly. This gives business owners the ability to inform customers of any changes to the service that you are offering. This also allows for you to update marketing and promotional materials as often and as frequently as you would like. The second advantage of the electronic commerce is the opportunity it offers to save on costs. By using the Internet, marketing, distribution, personnel, phone, postage and printing costs, among many others, can be reduced. You can start doing business in cyberspace for as little as $100. Most businesses will spend more than this but compared to the cost of opening a physical store, the savings are tremendous. These funds can then be diverted to marketing and advertising of your product or service.

Cyberspace knows no national boundaries. That means you can do business all over the world as easily as you can in your own neighborhood. Since the Internet connects everyone in cyberspace, information is transmitted at the speed of sound or the speed of light, depending on your connection. Either way, distance becomes meaningless, which makes you able to link to anyone on the globe and anyone on the globe can link to you. The ability to provide links makes doing business on the Internet attractive to customers in any part of the world.

Using the web to provide customer support is an excellent vehicle to help build the reliability and effectiveness of your product or service. The ability to provide on-line answers to problems through email or an provide an archive section of frequently asked

questions 24 hours a day, 365 days a year, builds customer confidence and retention. In fact, a whole series of IBM E-commerce commercials were based on this one single point. The Internet tends to be a more personal environment. People expect to get a real person when they send mail. This can work to your advantage as a small start-up company, or when you are a large corporation. No matter what business you are involved in, an online-help feature is an extraordinary advantage to have.

Disadvantages of E-commerce;

- ➢ Privacy and Security
- ➢ Willingness to Pay
- ➢ Technical Challenges
- ➢ Organizational Commitment

A potential source of trouble is customer concerns with privacy and security. Anything sent over the Internet is sent through several different computers before it reaches its destination. The concern regarding Internet security and privacy is that unscrupulous hackers can capture credit card or checking account data as it is transferred or break into computers that hold the same information. Security on the Internet is much like security for your home. There is a point when the effort outweighs the advantages. As with your home you usually stop adding security features when you feel safe. Making a customer feel safe is what is important in doing business on the Internet. Even though no one can guarantee 100% security of transferring financial information over the Internet, e-commerce is still safer than using credit cards at an actual store or restaurant, or paying for something with the use of a 1-800 number (unknown author, 1999). Also, every time you throw away a credit card receipt you could make yourself vulnerable to fraud. But how do we, as consumers, know this for sure? What precautions do e-commerce websites take to avoid such problems? The answer is simple: encryption.

Ever since the 2.0 versions of Netscape Navigator and Microsoft Internet Explorer, transactions can be encrypted using Secure Sockets Layer (SSL), an Internet protocol that creates a secure connection to the server, protecting the information as it travels over the Internet. SSL uses public key encryption, one of the strongest encryption methods around. A way to tell that a Web site is secured by SSL is when the URL begins with https instead of http. Browser makers and credit card companies are also promoting an additional security standard called Secure Electronic Transactions (SET). SET encodes the credit card numbers that sit on vendor's servers so that only banks and credit card companies can read the numbers. Obviously no e-commerce system can guarantee 100-percent protection for your credit card, but you are less likely to get your pocket picked online than in a real store (Weiss, 1999).

E-commerce is based on the assumption that the participants will pay for what they buy. There has been a noted reluctance among Internet users to actually pay, particularly for the digital goods and services. As a result, much of the current business on the Internet is funded using business models other than user-pays, primarily advertising and sponsorship. If a company is selling something, then they need to find a way to accept payment that is not only convenient for them, but most importantly, convenient for the customers.

Setting up a simple web site can be very inexpensive, but if you are unsure of how to go about creating one, a simple web site thus may not be so simple. And if you don't know what you are doing, your site will definitely not be effective. A functional web site with online ordering requires expertise in four different areas. If a business owner does not have HTML, CGI scripting, ODBC, and special programs for online clearing options experience, they may want to consider outsourcing. Outsourcing is the use of a third party service company to provide the missing pieces to complete the total functionality of the business. This is a cost-effective way to allow a site to get up and running much faster

and concentrate on the product or service rather than getting overwhelmed with the technical challenges. (DeCourey, 1999)

Finally, a possible disadvantage to e-commerce is not having a strong organizational commitment. A functional web site that is going to be successful will soon need additional resources in technology and skills. E-commerce is evolving at a very rapid rate and the business owner must be willing to evolve with it. Newer and more advanced technology will cost more, but should be supplemented by additional revenues. Also, the company must be willing to change the entire business or start a new one when they can see the need for change. "Yahoo started as a commercial operation in 1995, with a simple, if enormous, list of Web sites to help people navigate the Web. But like the Web itself, Yahoo is changing fast. The once amazing ability to search the entire World Wide Web became outdated in a Net instant, so Yahoo, at the tender age of two years, began reinventing itself as a place to trade stocks, make travel reservations, and conduct commerce. (Hof, 1998)

The Future of E-commerce

Rest assured the future of e-commerce is intact and ever changing. "Like electricity, antibiotics, or the car, the Internet is a revolutionary technology."(France, 1999) It is quite evident that e-commerce is only gaining speed. As one article stated, The growth of e-commerce won't diminish, it will become such a pervasive influence on how a company works that all functions within an organization will have a stake in their e-commerce strategy. (Wareham, 2000)

With Internet traffic doubling every 100 days the digital economy is alive and growing. The huge growth of virtual communities is causing shifts in economic power from large corporations to smaller businesses. "Virtual communities erode the marketing and sales advantages of large companies. A small company with a better product and better customer service can use these communities to challenge larger competitors--something it

probably could not do in the real world." (Commerce Net, 1999) With many of the technological advances in the banking, on-line trading and retail industries, e-commerce will soon become the foundation of our life just as radio; telephone and television have in the past.

Technology has a place in everyone's day to day activities and soon e-commerce will be a major factor in the decisions we have to make. Remember, e-commerce is more complex than just buying that special someone's birthday present. E-commerce, along with the Internet, is an outlet for business. It is a way for the new guy to compete with the proven giants in the industry. An example of this would be the launch of Walt-Marts new web site intended to compete with industry monster Amazon.com. Their new business venture allows Wal-Mart to go outside its usual corporate sphere for Web-savvy talent geared for dot.com commerce, such as engineers, programmers and marketers. It also provides them with the necessary Web-wampum ¡V such as options, warrants and shares that's essential to attracting top talent. (Veverka, 2000)

Simply put, the Internet and the use of e-commerce provides many opportunities for even the smallest of businesses to compete with large corporations, in essence leveling the playing field. With the steady growth of the Internet, and the fact that every year more and more families are plugging in and surfing the web, can a company survive without the use of the Internet and e-commerce? Probably, but not for long. The Internet and e-commerce are here to stay, so businesses can either change with the times, or get left behind. The choice is theirs to make.

My experience as e-customer.

The purpose of this letter is to file a complaint about the business tactics of Dell Computer Corporation for deceptive and unfair business practices and acts as defined by the Federal Trade Commission. Dell Computer Corporation's online advertising and telephone sales representations are deceptive in that they mislead the consumer and affect the consumer's behavior or decisions about their products or service.

In response to a Dell online advertisement offering free shipping on a Dell computer, a savings of $95, on June 8, 2001 I ordered by telephone a Dell computer. The Dell salesman confirmed that there would be no shipping charge. Immediately after giving the salesman my credit card number, my account was charged a $95 shipping charge in additon to the full price of the computer. This was contrary to their online offer of free shipping and the confirmation by telephone by the salesman of free shipping.

When I found out I had been charged for shipping, I attempted to reach the salesman that I ordered it from, did not know his extension, and reached another salesman who chided me for not knowing how to contact the salesman I had purchased the computer from. His words were something to the effect that "you mean you spent a few thousand dollars on a computer and you don't even know who you bought it from?" He then hung up on me. I called back, got another salesman, and he said the shipping charge was an error and would be taken care of.

Later that day, I spoke to another Dell salesman about the software that was included with the computer I had purchased. The salesman was unknowledgeable, rude and surly. After being hung up by one salesman and treated poorly by another, I canceled the order by e-mail, telephone call and by letter on June 9, 2001.

In response to my letter to Dell dated June 9, 2001, I received a letter dated July 23, 2001 from Leslie Heryford of Dell Customer Service. In this letter, she apologized for the difficulties I had encountered while attempting to purchase a Dell computer. She further said that if I reconsidered purchasing a Dell computer, Dell would discount the price by $100. The discount would be applied post-sale, and I would have to apply for it. I had

little confidence in this offer because by this time I did not have much faith in any discounts from Dell, especially one to be applied post-sale and only by applying for it.

I contacted Leslie Heryford by phone on July 30, told her I would reconsider purchasing a Dell computer and that I wanted the $100 discount at the time of purchase. I further told her that I would configure a computer on Dell's website, send her an e-mail showing the configuration, and request that Dell confirm by e-mail the exact price I would be charged on my credit card. If the confirmation price agreed with Dell's online configured price, I would e-mail her the configuration and the confirmed price along with my credit card number and replica of my signature, and she could order it. Leslie Heryford agreed to this and said she would call me the next day, July 31. She never called me again.

On August 1, 2001, I configured on Dell's website an Optiflex G150X, and sent the configuration and Dell's price for this configuration to Leslie Heryford for a confirmation by her. At the time, this Dell computer was being offered for $200 off the regular price and free shipping. I also reference the $100 discount she promised me, and requested that she confirm by e-mail the price as determined by me on Dell's website. The confirmation was not forthcoming. I got no reply to my request for a confirmation of the configured price.

On August 6, I again e-mailed her, and finally got a reply, but not a confirmation or quote. I got a convoluted e-mail from her telling me that the computer I had configured was handled by the business division, not by the home division that she was working on it with this division and did I still want a quote. I e-mailed her two more times requesting a confirmation of the price I had configured on their website on August 1, and still was unable to get a firm quote from Dell. I also e-mailed a Dell supervisor, Mr. Todd Lanier twice, asking him to intervene in this effort of mine to get a confirmed quote from Dell, and he failed to answer either e-mail. I also e-mailed the business division of Dell and received no response from them.

It is my contention that Dell will not confirm by e-mail a price derived from their own website because they have no intention of selling me this computer at this price. It is my

contention that these prices are a come-on, are deceptive, unfair, and are designed to mislead the consumer and influence the consumer's behavior and decisions about purchasing the product. The only way you learn the price that you are ultimately going to pay is when you call your credit card holder, and they tell you the charge Dell put on your account. Dell does not confirm what you bought and the price you paid until after you have placed the order and given them your credit card number and the charge has been put on your credit card. And you can be sure, you are going to be in for a surprise.

Conclusion

E-commerce is the sale of products and services over the Internet. It is the fastest growing segment of our economy. It allows even the smallest business to reach a global audience with its product or message with minimal cost.

- Currently, there are more than 250 million people using the Internet internationally.
- Sixty-nine percent of the online population has made at least one purchase in the last 90 days. By 2007, two-thirds of U.S. households will be online shopping.
- According to the January 2005 Trend/Forecasting report of The Dilenschneider Group, in the U.S. alone, the 2004 holiday season online shopping jumped by more than 25% from 2003.
- The average income of Internet households is over $66,790, making the Internet user a very attractive customer for you to target.

For example Amazon.com and Barnes & Noble have established their hold over the book market, and their sheer size, name recognition and the relationship of trust they have with their customers allows them to dominate this market with good pricing (due to economies of scale) and remarkable customer loyalty.

A Website doesn't need to exist solely to sell your product online. It could supplement the sales of your already established retail store. If you sell a unique product, such as wheat grass or gourmet chocolates, you might find success reaching others around the country

(or the world, for that matter) who do not have access to these products in their own towns.

Using the Internet for conducting e-commerce will not assure you of being able to compete favorably with large established competitors. They already have the inventory, delivery and marketing systems in place and they can deliver the groceries as cheap (or more cheaply) than you can. Yet, the beauty of the Internet is that it provides a global audience of potential customers and it never closes.

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