



Doing Business with a " e " : The e-Commerce story

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Introduction

Electronic Commerce (E-commerce or EC) is the exchange of business information using electronic formats, including Electronic Data Interchange (EDI), Electronic Mail (e-mail), Electronic Bulletin Boards (EBBs) and Electronic Funds Transfer (EFT). E-commerce Technologies are designed to replace traditional paper-based workflow with faster, more efficient and reliable communications between computers. To conduct business in the current environment using E-Commerce technologies requires that a business have access to a computer and a modem. This article is intended to introduce you to E-Commerce technologies mentioned above, to provide you with an overview of the use of E-commerce technologies in the commercial arena and to show you how to use these technologies to benefit your business.

E-commerce is what happens when you combine the broad reach of the Internet with the vast resources of traditional information technology systems. It uses the Web to bring together customers, vendors, and suppliers in ways never before possible e-commerce is here and presents abundant opportunities. Companies around the world already buy and sell over the Internet. They connect with customers, suppliers and each other. They do business on the WEB, and consequently, they do more business. There are challenges like security, scalability and reliability. They are real, but they are surmountable. E-commerce is about web enabling your core business processes to improve customer service, reduce cycle time, get more results from limited resources, and actually sell things. In its simplest terms electronic commerce is the process of two or more parties making business transactions via computer and some type of network - e.g. a direct connection or the Internet. This includes business-to-business transactions, online retail, and the digitalization of the financial industry. Some experts and leading Net Entrepreneurs even argue that electronic commerce includes all the steps that occur in any business cycle, such as placing ads, completing invoices, and providing customer support. The term "e-commerce", often used interchangeably with IBM's coined term "e-business," covers a lot of ground and refers to all these areas.<< [Up](#) >>

Background

E-commerce actually began in the 1970s when larger corporations started creating private networks to share information with business partners and suppliers. This process, called Electronic Data Interchange (EDI), transmitted standardized data that streamlined the procurement process between businesses, so that paperwork and human intervention were nearly eliminated. EDI is still in place, and is so effective at reducing costs and improving efficiency that an estimated 95% of Fortune 1,000 companies use it. It was, and is, the foundation of electronic commerce.

Today, electronic commerce increasingly refers to business conducted over the Internet. EDI, for example, is being brought to the Internet and allowing companies to save money by eliminating the old system's expensive private networks and by expanding reach to include more businesses on the supply chain. Other business-to-business transactions are simply moving to the web without using the standardized forms required by EDI.

But the e-commerce buzz that you hear on the radio, see on TV, and read in the papers and online refers to online retailing -- using the web to sell goods, services and information to consumers. Online retailing began four years ago, and was pioneered largely by Internet companies that didn't (and some still don't) perform traditional retail, such as Amazon.com and CD Now.

More recently, brand names like Barnes and Noble, the Gap, and Wal-Mart and Indian companies like BPB publications and rediff on the net have set up shop on the Net, and many experts believe that these and other brand names will be able to establish long-lasting presence on the Web. Today, all a person needs is a computer, a browser, and Internet access, and he or she can buy flowers, airline tickets, and even a car. Tomorrow... who knows. The sky's the limit. << [Up](#) >>

Advantages and Pitfalls

Most e-commerce studies cite speed and convenience as the reason for the e-commerce upsurge. I think there's something more fundamental going on. Something that is both an opportunity-for consumers-and a danger-to old-line businesses. In short, e-commerce obliterates the barriers that have long propped up traditional retailing.

Barriers and Geography can be accessed every corner of the globe without building physical stores and a website .Time, it's costly to keep a physical store open 24 hours a day. Web sites are always open. so also and switching cost comparison-shopping is a breeze, because all shops are just a click away. Businesses can no longer rely on incomplete information to keep customers paying inflated prices. The competition is just a click away. No longer are customers locked in by the time and hassle of finding another supplier.

Some of the obstacles that may delay the success of online commerce are that most computer users were about transaction security, and get so for stated that the abort transaction. only a few online purchases are gift related and surfers also felt about inadvertently patronizing a fly-by-night operator. These are all the disadvantages assuming an online audience. Given the facts of Low-pc penetration and Internet Usage e-commerce as an industry has still a long way to go. << [Up](#) >>

Setting up a E-Commerce Store

The hottest game on the Internet right now is e-commerce, which by now ahs a lot of players and few winners. One of the biggest challenges in developing a successful online storefront is choosing the right software solution for your site, which can make the difference between making money and losing money on the Web.

An electronic commerce business is no less demanding than any other type of business operation, but it is also quite different. Instead of the traditional brick and mortar storefront, everything happens in the form of bits and bytes flowing over the Internet and what makes it tick is e-commerce software. To engage in pages that can inform customers, display products, conduct purchase transactions, and provide feedback and results. The most critical decision is determining which e-commerce software a company should use to do all of this. One complex solution is to develop your own customized software. This requires the work of many specialists in web and programming languages (HTML, Java, etc.) Most companies would fare better by investing in a commercial software solution provider.

There are now dozens of companies offering virtual storefronts and shopping carts on secure servers. The payment part can be handle by products from companies such as IBM and Micro Soft and specialist companies such as Icat and vision factory. In some cases you do not even have to buy the software but simply rent a website and programming from a webhost. However the first decision to be taken is of deciding what kind of e-commerce you want-consumer, business to business. or both. the consumer side of e-commerce is retail trade, where companies offer products for immediate purchase. (This distinguishes e-commerce from sites that merely promote products) the business to business side of e-commerce e-commerce can involve both wholesale purchasing and electronic data transfers (payments, invoices) between business partners. not all e-commerce software can do both, not without additional programming and expert configuration.

Indian businesses trying to get into e-commerce maybe frustrated, since in India RBI does not allow credit card information to be taken over the internet without a legally binding signature. and until the Indian

government recognizes digital signature for customer verification over the Internet e-commerce growth in India will be slow. << [Up](#) >>

E-Commerce Software and Security Issues

Because they are impersonal, Internet transactions can get downright touchy. A sense of security needs to be established without creating the feeling of fort Knox. Customers must be able to select a mode of payment and the software must verify their ability to pay. This can involve credit cards, electronic cash or purchase orders. specialized software such as cyber cash and Microsoft wallet can verify the purchaser and the purchase. e-commerce software usually work with the Secure sockets layer (SSL) developed by Netscape or the Secure Electronic Transaction(SET) technologies for encryption of data transmission. The more of these supported by an e-commerce package, the better. Most e-payment solution providers will require that the company establish a special bank account to handle the online transactions. More on opening your online store later on in this article.

With security being an issue with most online customers merchants and others are looking to exploit the huge potential on-line market with two choices: use conventional follow up systems like faxes and phone numbers to make the customers feel more secure or develop better systems of online security. While the first will probably continue, its second choice which is gaining more credibility- Digital cash. Encryption as already discussed is being used to protect information while it is being transmitted between a customer and a merchant on the Internet. Netscape uses the secure socket layer in their commerce server to provide server authentication, data encryption, and message integrity. SSL provides capabilities similar to the more familiar " berkely sockets" or Winsock services. SSL sits between application protocols such as http, telnet ftp etc and the underlying protocol TCP/IP. but unlike ordinary socket connection, once your web browser has established a connection to a server using SSL, you know which merchant you are connected to , and you that your communication with that merchant is secure from eavesdropping or tampering.

The method used to establish identity is based upon an object called digital certificate. A digital certificate simply ties together a public key with say the name and address of the customer or merchant. The trick is that these certificates are signed by a trusted third party, in much the same way that the passport is signed by the government that issues it. Verisign, a spin off from RSA data security is in the business of issuing these certificates which they called Digital IDs. Currently these are digital IDs are not recognized by the Indian government.

The other methods besides Credit card processing are ecash and ecredit , both of which require you to set up an account with an ecash provider and buy only from merchants who have also registered with that provider. When you purchase something online it gets charged to your real credit card, with the provider taking extra measures to protect your security. Although electronic or digital cash is not yet wide spread, banks are issuing it allowing you to purchase items at registered retail sales. Electronic cards are coming up fast employing coded messages secret numbers and electronic buyer identification. Besides Verisign another guarantee of security can be found in Secure Electronic Transaction (SET) . Set was developed by Visa and master card with participation from several technology companies including IBM and Microsoft. This system means that your entire credit card number is never travelling across the net- rather pieces of it are- and that no human eye sees the entire card number. << [Up](#) >>

E-Commerce in India

The past 2 years have seen a rise in the number of companies' embracing e-commerce technologies and the Internet in India. Most e-commerce sites have been targeted towards the NRI's with Gift delivery services, books, Audio and videocassettes e.t.c.. Major Indian portal sites have also shifted towards e-commerce instead of depending on advertising revenue. The web communities built around these portal sites with content have been effectively targeted to sell everything from event and movie tickets the grocery and computers. The major in this services being Rediff on the net (www.rediff.com) and India plaza with started a shopping section after

their highly successful content site generated WEB visitors . In spite of RBI regulation, low Internet usage

e-commerce sites have popped up everywhere hawking things like groceries, bakery items, gifts, books, audio & videocassettes, computer e.t.c. None the major players have been deterred by the low PC penetration and credit card usage in India and have tried to close the success worldwide of online commerce. BPB publication went online selling its complete range of computer books about 2 years ago, it might not have the success of either Amazon.com or Barnes and noble. but they definitely have promised the cause of e-commerce in India with at least 1 to 5 web sites like India bookshop coming online.

This is not to say that the e-commerce scenario has been bad in India as highly successful e-business like baba bazaar and India mart have proved. Indian Banks too have been very successful in adapting EC and EDI Technologies to provide customers with real time account status, transfer of funds between current and checking accounts, stop payment facilities. ICICI Bank, Global TRUST BANK AND UTI-Bank also have put their electronic banking over the internet facilities in place for the up coming e-commerce market speed post also plain to clone the federal express story with online package status at any moment in time . The future does look very bright for e-commerce in India with even the stock exchanges coming online providing a online stock portfolio and status with a fifteen minute delay in prices. The day cannot be far when with RBI regulations we will able to see stock transfer and sale over the Net with specialized services like schwab and e*trade.

Though with security and encryption being proven Technologies for transfer of funds over the Internet, the Indian Government still has problems with 'Digital signatures' and verification processes over the Internet. This combined with RBI norms and regulations has proved to a major handle for e-commerce even though VSNL India's monopolistic ISP does want to jump on to the electronic transaction bandwagon with the advent of private ISP's and India new and positive attitude towards IT and the prime ministers new 'IT policy " the future is very positive in India for doing commerce with a-e. << [Up](#) >>

The Future of E-Commerce

What does the future hold for e-commerce? Many would say it is difficult to predict. The forces that determine the web's winners and losers are just taking shape and technological advances could add even more uncertainty. On the downside, some experts predict that it will be increasingly difficult for smaller companies to establish their presence. Public companies and traditional brand name retailers have deep pockets and a name recognition that will make it difficult for smaller sites and mom-and-pop shops to attract customers, thereby forcing them to compete with the big boys. On the Net, it's one big neighborhood. On the upside, nearly all experts believe that overall e-commerce will increase exponentially in coming years. Business to business transactions will represent the largest revenue. Online retailing will also enjoy a drastic growth. Areas expected to go include financial services, travel, entertainment and groceries. And for those considering opening a virtual storefront, forthcoming technology and standards agreements will make it easier to create a site, to protect it against payment fraud, and to share information with suppliers and business partners. << [Up](#) >>