E-Business Primer

An Introduction to E-business

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Purpose

E-business solutions encompassing both B2C and B2B business models can be purposefully applied to all types of businesses regardless of economic situations. Marketing strategies need to be adjusted to accommodate the different environment. Besides being able to improve client channels allowing businesses to find more clients, e-business solutions can also be applied to help businesses to reduce costs and maximize the efficiency of their business systems.

By becoming a premiere e-business consultant, the company can leverage its knowledge both in strategy and technical consulting to aid other businesses to improve the efficiency of their business models through long and lasting relationships.

Why would businesses need to be 'e'-nabled?

Need for continuous improvement

Enterprises must continuously seek new and better ways to conduct business in order to achieve and sustain market leadership. The digital economy is a real-time economy. Constantly evolving customer needs and desires and furious competition require enterprises to embrace speed as a core business value. Businesses must be able to design, produce and deliver high-quality products and services in a fraction of the time they used to take; however, speed isn't limited to time to market.

Businesses must also be able to quickly transform themselves, adapt to change and innovate. By digitizing everything -- actively converting all elements of the enterprise from the physical to the digital -- businesses become agents of speed in the digital economy. They gain immediate access to timely, relevant information. Consequently,

businesses improve response time to customer requests and, ultimately, achieve service excellence.

Allow new methods of collaboration

One key trend that describes the current state of the digital economy is the evolution of the collaborative enterprise, in which the walls among traditional organizations fall and virtual collaborative enterprises form. New partnerships and alliances give rise to innovative technologies. Businesses find that they cannot go at it alone. Enterprises must join forces, often in ways never before imagined, to fulfill customers' demands for speed, customization, high quality and lowest possible cost.

The digital economy is fueling rapid changes in technologies, processes and business models, which create enormous complexities for businesses. Enterprises must align with others to address these business issues and to deliver sustained value to their customers. Previously, businesses outsourced everything that was not considered "core." This often meant that technology was outsourced. Today, technology is core to an enterprise's business, and it is also so complex that it requires a technology partner.

Establish Trust

Strong, long-lasting business relationships have always been based on trust. To establish trust in the digital economy, enterprises must not only develop customer intimacy but must also ensure that customer security and privacy requirements are part of the customer relationship strategy. Firms that consistently earn their customers' trust will win business and lead the competition in the digital economy.

More than ever before, customers want their voices to be heard, their needs to be understood and their values to be reflected in the marketplace. Businesses must establish trust by creating strategies and initiatives to understand and act on customer preferences.

Digital technologies, such as the Internet, have made it easier to learn more about customers: enterprises tap huge databases containing customer information and use deep computing to derive conclusions about customer behaviors, needs and values. Customer intimacy and digital wisdom result.

Concurrently, businesses must factor in security and privacy requirements. Digital security of company assets, records and information is a primary concern facing businesses today. "Cyber crime" strikes fear into the hearts of individuals and enterprises, and no one will do business with those who do not take measures to guard against it and elevate digital security to a top priority.

Eliminate Boundaries

Digital technologies remove barriers that inhibit business relationships and knowledge sharing across geographies and among traditional enterprises. Market leaders in the digital economy will use new technologies to dismantle borders, including geographical, technical, commercial, social, cultural, and economic boundaries.

With the trend toward globalization, new technologies, such as broadband communication and the Internet, help bypass geographic boundaries. Additionally, by instituting practices that champion mobility, businesses can meet consumers' expectations anytime, anywhere and any way. Businesses must also eliminate the distinction between "old economy" and "new economy" enterprises. Too often, this distinction is misinterpreted as a need to convert a "brick and mortar" business into one that is solely online. Successful enterprises in the digital economy must integrate the "old" with the "new." The benefits of eliminating boundaries are numerous: geographic expansion of your business, elimination of being tied down to "old ways" and processes of doing business, improved feedback with partners and enhanced efficiencies leading to reduced costs.

E-Commerce Primer

What is E-Commerce?

Commerce is the exchange of goods and services for money. Historically, commerce has been accomplished when the buying party exchanges a fee with the selling party for the goods purchased or services rendered. Barter systems notwithstanding, the fee so far has been paper money or checks, bank drafts, credit cards, or other representations of hard currency.

Data management for traditional transactions has been limited to manual, or more recently, computer-based bookkeeping. Security is largely absent in the traditional transaction model; if the buyer has to physically be present to make a purchase, the chances of fraud are low. This is the concept Visa had in mind when it began issuing credit cards containing the cardholder's photo.

E-commerce can be defined as commerce conducted via any electronic medium, such as TV, fax, or the Internet. The first two media have been in use for long enough that issues such as data management and security are well understood, whereas the Internet is still developing in the areas of commerce, data management, and security.

Elements of E-commerce

E-commerce is an integration of communications, data management, and security capabilities that allows organizations to exchange information about the sale of goods and services.

The basic elements that differentiate e-commerce from traditional commerce are:

Communication: Communication services support the transfer of information from the buyer to the seller. Communication is devoted to providing the same protocols and procedures that enable a common digital language to a heterogeneous, worldwide audience. These protocols and procedures allow you to complete electronic transactions. Part of the "digital language" requirement in e-commerce is that all computers must communicate with each other using TCP/IP, the standard networking protocol for the Internet.

Data management: Data management services do two things. First, they allow you to store this information in a retrievable, reusable way. For example, an e-commerce site makes extensive use of databases. Second, these services allow you to track users, processes and information as they pass through your site. One of the ways this occurs is through the use of cookies, which are small text files sent from the Web server to a client's computer.

Security: Security mechanisms authenticate the source of information and guarantee the integrity and privacy of the information. Security mechanisms are of paramount importance here, because unlike traditional transactions, electronic transactions do not require the buyer and seller to be in physical proximity to complete a transaction.

E-commerce Models

Traditionally, information was exchanged via person-to-person contact, or through telephone or postal systems. In e-commerce, information is carried through a networked computer system, and a typical business transaction is almost entirely automated.
E-commerce pulls together a gamut of business support services, including email, online directories, ordering and logistical support systems, settlement support systems, inventory control systems, and management information and statistical reporting systems.

In traditional commerce, where the participating parties are physically in the same place, a request for a standard identification item such as a driver's license or a passport can take care of nonrepudiation and authentication. That method of verification doesn't work online. Instead, digital signatures and encryption frameworks have been developed to address these security issues.

Broadly speaking, the primary models of e-commerce are business-to-business and business-to-consumer.

Business-to-Business e-commerce

In the business-to-business e-commerce model, suppliers develop standard, low-cost channels to sell to corporate customers. For example, consider a Fortune 500 company that wants to allow its employees to buy sundry items such as office supplies online. It can set up an open purchase order with an office supplier and allow employees to access the supplier's Internet site to make purchases.

It is somewhat challenging to derive profit from a business-to-business model. The chief reason for this is because corporate customers expect quantity discounts. Additionally,

the merchants involved expect delivery and/or payment within certain time frames. Another name for this type of business-to-business commerce is inter-company commerce. This model is characterized by high volume and low price margins.
A related practice is providing transactions between divisions in your company. Larger corporations use Intranets to help conduct high-volume transactions. Such intra-company commerce transactions may also include stricter delivery, billing, and processing guidelines for these transactions.

Business-to-business transactions often use supply chain management, which is the virtual integration of partners on the supply and process chains. E-commerce provides the advantages of timely communication and automatic processing.

As you have seen, intra-company communication requires an Intranet, which is basically an internal network that uses Internet-related technology. An Intranet offers several benefits. Among them are training support, an enhanced sense of community or corporate culture, reduced costs for such things as employee handbooks and policy manuals, software distribution, and knowledge sharing.

Similar to Intranets, extranets provide for limited sharing of a company's information with selected partners outside the company. Such partners could include customers, suppliers, regulators, industry organization colleagues, and universities.

Business-to-Consumer e-commerce

In the business-to-consumer e-commerce model, commerce is conducted between a consumer, such as a home user on a PC, and a business. For example, to buy books or CDs on the Internet, the consumer accesses the business' Internet site and makes purchases.

The business-to-consumer e-commerce model is characterized by its volatility. In such a

model, both volume and price margins vary on an almost daily basis. Although it is possible to establish a baseline of activity that helps predict the number of users to a site, many e-commerce sites are surprised by the activity--or relative inactivity--of their Web sites during certain periods.

Factors such as demand, inventory shipping, and suppliers all vary widely depending on the type of product or service you supply. There may be times where you may have a high supply of merchandise and high customer demand. On the other hand, you may run into problems keeping up with demand, because your supplier may require a higher price for the same goods, due to their popularity.

Also keep in mind that the consumer is motivated to purchase for many reasons, in addition to price and efficiency. Consequently, the business-to-consumer Web site must be attractive and usable in addition to offering a product or service desired by the consumer.

The basic building blocks for setting up an e-commerce Web site, whether business-to-consumer or business-to-business, can be observed in the variables that drive a business-to-consumer e-commerce model. Businesses typically create some version of the Web storefront as an interface with their customers.

Potential Problems in an e-commerce environment

So far we have discussed many benefits that e-commerce offers business owners and customers. However, e-commerce does have some disadvantages. One of them is a greater vulnerability to credit card fraud. Because the network carrying computerized e-commerce transactions (complete with names and addresses of buyers and credit card numbers) is public, the potential for fraud can be a serious concern.

Intellectual Property

Protecting intellectual property becomes a problem when it is so easy to duplicate information and create illegal copies of copyright-protected material.

Confidentiality

Refers to the confidential transmission of data. Mechanisms to pay for goods and services on-line and the introduction of new products and services add additional risk to sending financial information over the network.

Tax Discrepancy

Where buyers and sellers are geographically disparate, it is simply difficult to calculate sales taxes on two different locations. Who has precedence and how will the calculation of taxes be resolved?

Customs

The Internet spans national boundaries. However, e-commerce business owners must follow customs and import restrictions, including the paperwork.

Regulations

Government bodies and regulators may enforce restrictions that invade privacy or hinder security. What are the rules?

Fraud

How can consumers and business owners be protected in an e-commerce environment from unauthorized and fraudulent transactions?

Security

Authentication, non-repudiation, accountability and physical delivery are all handled somewhat differently under the e-commerce solutions now in place. When will a consistent baseline be available?

Trust

If a web-based business is easy to set up, it is just as easy to tear down. In traditional transactions, the buyer and seller assess each other before completing the transaction. How will a web business assure customers that it will be there when they need service or support?

Ubiquitous Availability

If this is an advantage, it is also a risk. What happens to business opportunities that might be lost during service disruptions?

Advantages of E-commerce

Establishing an e-commerce storefront on the Web is rarely simple. Creating a storefront involves a host of design, marketing, and infrastructure issues. Consider infrastructure, for a moment. More simple Web storefront creation options involve coordinating your activities with an Internet Service Provider who will host your electronic storefront for you. A more involved solution involves building your own servers and leasing your own Internet access lines.

Your Web storefront may be the sole means selling a customer or a supplement to an already-existing business. Still other situations involve businesses that wish to migrate from a bricks-and-mortar business model to the Web. Regardless of situation, you will have to weigh the costs and benefits involved in adopting the Web business model.

Costs of e-commerce include:

- Equipment and software cost
- Design teams
- Server administration
- Database administrators

- Marketing experts

The benefits of e-commerce include:

- Instant worldwide availability and easier entry into new markets
- Streamlined buyer-to-seller relationship
- Reduced paperwork, errors, time, and overhead costs
- Improved market and product analysis

Accessing E-commerce suitability

Before immediately going ahead proposing e-commerce to every client, we have to assess a number of issues regarding the targeted company we wish to consult for. Some of the questions we can ask ourselves are:

- Can this business become accessible via the Internet? Why or why not?
- What type of communication service is this company using? Why?
- How does the company's electronic commerce model compare with its traditional commerce model?
- Is the company using the business-to-business model or the business-to-consumer model?
- What three advantages might the company enjoy from providing electronic commerce?
- What problems might the company encounter as a result of providing electronic commerce?

Once the pros and cons of the questions above can be weighed effectively, a decision on how to provide the solution can be determined.