

Introducing E-commerce

Electronic Commerce is *the* emerging business opportunity of today. The initial phase of information publishing that exemplified the early use of the web is being complemented by the deployment of critical business systems. E-commerce is becoming a reality as the supporting technologies are evolving to ensure that business requirements can be met to the fullest. The web is already changing consumer purchasing habits and the way businesses interact with one another. As web-oriented technology evolves and new business processes are defined we will see even greater changes in the day-to-day activities that effect the individual consumer as well as major businesses.

E-commerce Evolution

Background

E-commerce began in the 1970s when tremendous cost savings were achieved via a process called Electronic Data Interchange (EDI). This process of automated exchange of business data among business partners to streamline business activities has enabled tremendous savings in paperwork and human intervention. With the fast growth of Internet technology, organizations are moving away from using costly private networks to more cost effective Intranets and Extranets.

Today – Widespread Internet Usage

The great success of the web as being a static information provider is now shifting to the next phase and new challenges of e-commerce. The technological evolution enables businesses to integrate even more of its supply-chain on-line. E-commerce encompasses a vast spectrum of processes, technologies and businesses all intertwined to enable quicker and more efficient business transactions. Even though the impact of e-commerce will be stronger in the industries where the product or services are largely digital, the effect will be substantial throughout all service oriented and information intensive industries.

E-commerce has received a great push forward with the evolution of the Internet technology. The explosion of Internet usage, particularly outside of the US, is boosted by economic change and IT growth. The Internet is becoming a mass media that is now available, accessible, affordable and desirable in private homes, as well as in businesses around the globe.

This phenomenon has expanded the initial EDI business usage to more advanced and integrated business-to-business practices. In addition, convenience for the consumer for online retailing has sprung a whole industry servicing the business-to-consumer market for the purchase of goods, services and information.

Tomorrow – A New Way of Life

The Internet is expanding throughout the world with the number of users predicted to nearly double in two years. The virtual enterprise of tomorrow will be defined by business relations and not by geographic limitations.

The forthcoming technology and standards agreements will make e-commerce applications easier to create, maintain and protect against fraud and security violations. Information-sharing between suppliers and business partners will be more easily achieved. This will cause

a fundamental shift in the way business is done, either by the home user or by the big business corporations.

The convenience level and business benefits of e-commerce will soon be a pre-requisite for business success. These major advantages are already beginning but will be taken for granted and expected tomorrow.

The Opportunity

E-commerce business-to-consumer systems has been deployed by virtual computer shops, book stores and other online businesses. However, these kinds of systems are only the tip of the iceberg when it comes to the real business potential over the web. The still emerging business-to-business model is where the majority of money will be spent both on supporting technologies and on the redefinition of business interactions. Organizations that extend the business-to-consumer model to automate supply chain interfaces and integrate other business processes **will realize great efficiency gains and competitive business advantage.**

GartnerGroup claims that the integration of the underlying technology infrastructures for business-to-consumer with business-to-business is important in order to ensure success for the demands of tomorrow. The connection of customers, salespeople and suppliers on-line enables more business faster. The advantage of more accurate information, better customer service and reduced sale cycles will enable tremendous gains. The increase in sales and reduction in operational costs stems from a wide set of factors such as use of customer profiles, personalized customer service, high quality self service and value-added services tailored to individual needs. This critical marketing input enables the vast opportunities of e-commerce.

Magic Provides a Complete Solution

Magic is well positioned to take advantage of this fast emerging business of e-commerce. Hundreds of users around the globe are deploying web-based state of the art e-commerce applications that were built with Magic's highly productive development environment. Today, there is no question that organizations that want to stay in business must get their business onto the web. Magic Software Enterprises provides complete solutions including applications, services and tools to enable companies to quickly move their business onto the web.

eMerchant is Magic Software Enterprises' solution for enabling business-to-business applications. eMerchant, a Magic based application, is designed to manage inventories of hundreds of thousands of products and process thousands of transactions per hour. Whether it is a company seeking to link its supply chain or a super store that is looking to gain a competitive edge, eMerchant provides utmost flexibility and time to market that is unique in the industry.

A key issue when solving the supply chain business puzzle is to provide a seamless integration with existing business processes and legacy systems. Interoperability with the current applications both in-house as well as with the trading partners is key to success.

Magic enables companies to bridge disparate information sources, thus increasing business communication among organizations with a wide variety of platforms. Magic's multiple native database gateways enable faster integrated data access saving time and money in today's world of electronic commerce. In particular, eMerchant provides a solution to ensure the corporation's integration with legacy data and systems so that past investments can be utilized to the fullest.

The complete solution must provide an enhanced business model and business processes to take into account the fundamental change brought about in the new business paradigm. The elimination of unnecessary processes and intermediate middleman will result in saved costs and will speed services.

Magic's application server encourages clear separation of the business rules from the presentation logic. Magic's dynamic partitioning permits modification as requirements change to ensure that the application is performing in the most optimal way.

An outstanding example that has taken into account the total business model is a Magic-based product management system that has been deployed in France in the restaurant industry. This application manages the supply chain of 450 restaurants including suppliers, pricing, ordering, menu scheduling, activity reporting and statistics.

A key advantage of e-commerce that must be carefully planned is the increased involvement of customers, partners and suppliers. As better and richer information is provided, the business model should take into account the tremendous advantages to be gained from personalized catalogues for selected customers with individual purchasing agreements and known buying habits. Dynamically changing accurate customer information should be constantly collected and analyzed to provide invaluable information for future planning and personalized marketing.

As an example, Magic's eMerchant solution enables quick order creation by remembering buying patterns, sorting profiles, and making suggestions based upon past history and current availability. eMerchant's sophisticated transaction processing and easy and quick manipulation of multiple items ensures that order production and delivery schedule is done with the utmost efficiency.

In addition, the technology is expected to handle the vast growth in the customer base. E-commerce applications must be scalable in order to ensure the unknown number of users that change unpredictably with unexpected peak usage. The infrastructure for twenty-four hour customer service must be provided as geographical boundaries, office hours and local holidays become irrelevant.

Magic's scalability was put to the test with an impressive business application in a coffee conglomerate based in Switzerland. Magic's e-commerce solution manages the conglomerate's sales and logistics over the web across the world.

Use must be made of today's security mechanisms to prevent fraud, permit electronic payment and ensure privacy. Standards and special purpose software must be incorporated in the total e-commerce solution.

Magic's built-in security scheme offers security, limiting application access according to a specified set of user rights, ensuring the essential reliability for business transactions. In addition, Magic's openness allows integration with third party software such as SET standards to ensure meeting the security demands. In Holland, an outstanding Magic-built application for planning events is successfully deployed to handle the complex dependencies when organizing such events that require coordination throughout the supply chain.

Conclusion

E-commerce applications must provide a solution that meets business needs. Every situation has its unique requirements and set of issues that must be solved to ensure utmost profitability. The issues of e-commerce are complex and a successful implementation is more than just some pretty screens. A complete solution taking into account the business objectives must be put in place to ensure the potential profits that are waiting to be made.

Magic Software Enterprises has a team of highly qualified professionals who provide business & technical consulting support worldwide. Magic makes it possible to provide the e-commerce solution you need to drive your business into the future.