BUSINESS THROUGH E-COMMERCE

Gurinder Singh*

E-commerce is causing an upheaval that is shaking the very foundations of business. Companies that have recognized the enormous opportunity and have moved to establish an effective e-commerce presence have enjoyed many benefits, including increased revenue from new and repeat customers, new and innovative ways to add value, and a competitive edge. Present paper examines the potential role of E-commerce and suggests strategies to introduce it in business organisations.

STRATEGIES FOR GROWING BUSINESS THROUGH E-COMMERCE

DEBUNKING THE E-COMMERCE MYTHS

Every technological revolution has been accompanied by myths and misunderstandings. Companies that believed the myths and acted accordingly at the time, stumbled, some irrecoverably. Consider these examples:

- * In the late 1800s, Western Union's belief that the telephone had no inherent value caused the company to miss the enormous opportunity to leverage its dominant position in telegraphy and become a leader in telephone communications. The result; AT&T eclipsed Western Union.
- * Thomas Watson of IBM estimated the worldwide market for computers to be about five. Fortunately for IBM, Thomas Watson Jr. realized the enormous potential of computers and repositioned the company to dominate the computer industry for several decades.

Some pundits are downplaying the potential for e-commerce because of numerous myths about the Internet, including:

- * The Internet has poor security, which will prevent companies from establishing links to exchange sensitive or business-critical information with customers and business partners.
- * The exploding volume of Internet traffic will slow response time so much that businesses and consumers will find it impractical to use for e-commerce.
- * The small number of regular Internet users and the characteristics and interests of typical users make them poor targets for commerce.
- * The reality is that e-commerce is growing at a phenomenal pace, due to the compelling business opportunities it offers.
- * According to Forester Research Inc., the 1999 volume of goods and services sold online in the United States and Europe will be more than double the 1998 figure, which exceeds \$5.1 billion.

^{*}Director, MBA (International Business) Amity Business School, Noida. U.P.

- * International Data Corporation (IDC), estimated the market at \$2.6 billion in 1996 and expects it to grow almost a hundred fold to \$220 billion in 2001.
- * Forrester Research also expects Internet-based e-commerce to increase from 12 percent of a typical company's revenue to 42 percent.
- * According to the Internet's largest demographic survey, conducted by the Georgia Institute of Technology in late 1998, of the 10,000 respondents, 47 percent had four year college degrees of better, and household incomes averaged more than \$53,000 a year.
- * A joint study from International Data Corp. and Relevant knowledge Inc. indicates that by 2002, half of the 102 million people in the US who use the Internet at home will be shoppers.

The Internet is rapidly becoming a mainstream medium for information, entertainment and e-commerce, presenting a compelling channel for businesses to increase revenues and profits, and reach new customers.

A COMPELLING OPPORTUNITY

Few companies can afford to pass up the Internet, a large and rapidly growing medium that represents significant potential for new revenues and profits. Internet technology is rapidly evolving to address security and bandwidth issues. And clearly, the Internet audience has grown well beyond the academics and technical people who were the early adopters.

According to a recent Business Week article, "In just three years, the Net has gone from a playground for nerds into a vast communications and trading center 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."

E-commerce offers a significant opportunity to strengthen relationships with customers, business partners, vendors and suppliers. And it extends a company's reach significantly, enabling it to do business with a new audience that was previously unreachable.

STRENIGTHENING BUSINESS-TO-BUSINESS RELATIONSHIPS

Business-to-business relationships offer significant short-term potential. Many industries have been using electronic data interchange (EDI) for years to streamline business processes and reduce the cost of doing business. Suppliers, manufacturers, wholesalers, distributors and retailers share inventory information and send orders, invoices and shipping data electronically. EDI enhances the flow of information and goods through the supply chain and eliminates manual reentry of data, thereby eliminating errors and costly delays.

Traditional EDI. however, is expensive and time consuming to implement. Many smaller companies simply can't justify the price of entry. According to Business. Week, adding a single trading partner to an EDI network can cost up to \$.50,000. In contrast, some internet-based EDI links cost less than \$1,000, making them affordable for a much broader audience.

What's more, EDI on the Web supports much richer information exchange.

These networks were costly and time consuming to implement, complex to manage, expensive to operate and required

proprietary software to access. Today, public IP-based network services supplied by Internet service providers (ISPs) offer an economically and technologically superior means of connecting facilities and networks. In addition, public networks enable customers and business partners to connect to a company's network by simply using standard Web browsers. The are compelling. economics companies report that the cost of connecting through public networks is as low as 10 percent of the cost of private WANs, with up to 20 times the bandwidth. These public networks significantly lower the barriers to e-commerce entry. As a result established companies face new competitors that are quickly moving into their space and gaining ground in the electronic arena. Many of these competitors weren't even around a few years ago.

RAPID ADVANCES IN INTERNET SECURITY

As companies integrate accounting, order entry and inventory systems and make access available through the Internet, issues such as security become critical. Major technology suppliers, including Microsoft, Netscape, IBM, Cisco and Lucent, as well as numerous startup companies, are all working to tighten Internet security. The result is that internet security is advancing at a rapid pace. *It has already attained the level of security available with other types of transactions, such as those conducted by telephone, fax and mail. And with new technologies, such as authentication and digital certification, e-commerce security will surpass that of other forms of commerce.

CHÁNGING CUSTOMER PREFERENCES AND EXPECTATIONS

The third trend is that customer preferences

and expections are changing. Today, many consumers prefer online shopping because of the convenience, reach and wide availability of information, products and services. Companies that don't develop an Internet presence will miss the opportunity to gain new customers and may lose many existing ones. In addition, technologically aggressive enterprises may insist that suppliers, vendors and other business partners conduct all business with them through the Internet. The cost savings and efficiencies offered by the Internet provide compelling reasons for these enterprises to eventually insist that all partners do business this way in order to remain competitive.

MAJOR FACTORS TO CONSIDER

Commerce on the Internet represents a revolutionary departure from traditional business methods and can be fraught with pitfalls. With all the myths and predictions swirling about the Internet, it is easy to misunderstand the medium and make mistakes.

The challenge is to mount an effective online e-commerce programme that attracts a large new audience (much of it previously unreachable), makes that audience satisfied, repeat customers and loyal, productive business partners. This involves much more than generating traffic. It encompasses all the factors that are required to keep the audience — from user-friendly design and architecture of the Web site to ease in conducting a transaction.

The move to electronic commerce involves new technologies, new ways of doing business and new processes. As a result, companies must be prepared to educate their target audiences in the benefits and techniques of the new medium. This is particularly true in the case of business-to-

business commerce.

There are three major factors to consider in planning an Internet strategy:

- * The importance of an early e-commerce presence.
- * The personalization and community that uniquely characterize Internet/Web relationships.
- Disintermediation and reintermediation of distribution chains.

THE IMPORTANCE OF AN EARLY E-COMMERCE PRESENCE

The Internet is fundamentally and rapidly changing the way commerce is conducted. Early entry into e-commerce gives a company early experience that results in an important competitive edge. It also preempts brand hijacking such as that effectively carried out by Amazon. com, and it meets the expectations of today's customers and business partners.

GETTING A JUMP ON THE COMPETITION

Early experience is essential to gaining and maintaining a competitive edge in the online arena. Customer interactions on the internet differ from traditional commercial interactions. Electronic advertising and promotion, for example are more personalized, customized and targeted. And the delivery of Web-based service and support must be structured differently to guide customers through self-service activities.

Companies cannot learn how to conduct business online effectively by merely watching what their competitiors are doing. They must "get their feet wet" and learn from their own experiences. Late entrants typically can't learn fast enough to catch up with earlier entrants. As a result, they may be permanently relegated to the role of follower rather than leader.

It is essential that companies go beyond imitation of find new value models and new ways of doing business. Being faster and cheaper may help, but true success will likely require changing the rules to bring a new type of value to a company's product or service offering.

Amazon. com, for example, has amassed a wealth of experience in doing business online. As competitors watch and imitate. Amazon. com continually adds, adapts and refines its services and processes based on its expanding experience in selling books on the Web. The company's early presence on the Web, along with its application of the unique characteristics offered by the Internet to its business model, has allowed Amazon. com to successfully maintain a competitive edge.

Another example is Microsoft Expedia. Although Microsoft was a proven leader in the technology marketplace, the company had no experience in the travel industry. Yet Microsoft recognized the opportunity to gain a significant share of an entirely different and new industry—online travel services. The company is now reaping the rewards of its successful entry into a new business.

AVOIDING BRAND HIJACKING

Traditionally, companies have used print, radio and television to leverage and expand brand identity, a process that takes persistence and a considerable amount of money and time. The Internet is a medium in which powerful new brands can be created almost overnight. These new brands can quickly overshadow those that have been well established in other media.

In two short years, Amazon com came from nowhere to become the leading bookseller on the Internet, beating out well-known names such as Barnes & Noble.

Amazon.com used a new methodology—Word of Web (the Web equivalent of word of mouth)—to establish the most powerful brand on the Internet for buying books. The fundamental nature of the Internet fueled this rapid growth by enabling people to talk about the brand through forums, online chats and other means. To preempt brand hijacking, companies much establish their brands in cyberspace as early as possible.

MEETING EXPECTATIONS OF THE TARGET AUDIENCE

The rising level of expectations on the part of customers and business partners puts pressure on companies to act immediately. Two years ago, people expected a company to have a Web site that merely provided "brochure-level" information about the company and its products. Today, people expect to be able to conduct business with a company through its Web site. For a consumer, such business might include competitive research, buying products, or and services support. receivina Expectations for a vendor or business partner could range form requests for proposals, sales automation (request for proposal submission, account tracking and status mechanisms), dealer support systems, auction sites and warranty claims processing. The pressure to deliver to these audiences increases exponentially as competitors begin to creatively deliver goods and services over the Internet.

THE UNIQUE CHARACTERISTICS OF THE INTERNET

People initially respond to new technologies by copying what they are already doing in the new medium. Early TV programs, for example, resembled stage plays. Likewise, early Internet sites resembed magazines and product brochures. Over time, people begin to understand the power and unique characteristics of a new medium, and they learn how to use that medium to their advantage. The Internet is no exception. Personalization and community are two of the major distinguishing characteristics of the Internet that a company must understand to develop an effective ecommerce business plan.

Newspapers, radio, television and other broad-based media are one-way and offer no interaction with their larget audiences. In contrast, the Internet provides a way to obtain customer information and feedback directly and immediately. Companies can use that information to create individualized experiences for their target audiences. This ability to conduct highly personalized, one-to-one marketing is a marketer's dream come true.

In addition, the Internet has fostered the development of thousands of online communities based on interests, including a broad array of newsgroups and chat rooms.

Companies can leverage existing communities or even develop their own communities to establish new ways of interacting with customers and partners. The personalized interactions that these communities enable increase the value of the experience for customers and partners. For example, customer service systems built on chats, discussion groups and video conferencing create communities in which customers can interact with the company as well as with its partners and its other customers.

EXPLOITING THE CHARACTERISTICS

One of the keys to successful entry into e-

commerce is to understand these unique characteristics and determine the best way to incorporate them into strategic plans.

The following two examples show how companies are successfully employing the unique features of the Internet in their ecommerce ventures.

- * Hammacher-Schlemmer, a 150-yearold provider of unique and unusual gifts
 for the home and office, is innovative in
 its use of personalization and tailoring.
 Customers can create their own home
 page on the Hammacher-Schlemmer
 Web site. Each time a customer visits
 the site, the system builds a page
 dynamically based on that customer's
 previous purchases. Customers
 appreciate the convenience and ease
 of shopping in this personalized
 environment.
- * REI, a leading merchant of sporting and outdoor gear, increased sales substantially on its Web site through target messaging in recreational newsgroups. It combined this messaging with focused mailing lists, strategic linking and online PR campaigns. These audience-building strategies have had a dramatic and very positive impact on the company's bottom line.

LAUNCHING A SUCCESSFUL E-COMMERCE INITIATIVE

A Web site that supports e-commerce can provide an important strategic asset for a business. A successful site has many benefits:

- * It tightens relationships with existing customers and business patners.
- It offers new revenue-generating opportunities—through new changels

as well as new business models.

- * It offers opportunities to reduce costs by streamlining processes.
- * It provides a competitive advantage.
- * It offers universal compatibility with other Internet-based TCP/IP solutions without-requiring proprietary software or special expertise to maintain it.
- * It positions the company for future growth and success.

Building a site can represent a significant investment in time and resources. A haphazard approach offen results in wasted money and lost opportunity. To be successful, companies must integrate e-commerce into their overall business strategies and processes. They must understand the role of e-commerce in the context of other revenue-generating channels as well as re-engineering and cost-reduction initiatives.

As part of this integration effort, companies should recognize e-comerce as a new and highly lucrative means of doing business — a new distribution channel. They should examine their market, business competition and core competencies carefully and determine how to leverage them into the new medium.

Armed with this knowledge and understanding, companies can then take a structured approach to the planning, design, development and deployment of Web sits for e-commerce.

Companies must also recognize that ecommerce may have a dramatic impact on existing business models. It may be necessary to redefine the current business model and perhaps modify relationships with the current channel or supply chain — or develop entirely new relationships or supply chains. Some industries will be more affected than others by the supply chain transformation that the Internet is causing. In some industries, a complete redefinition of the business model may be the only way to maintain a competitive edge. As a result, a careful examination of the existing business model and how e-commerce may affect it is essential for success in the online arena.

There are three primary phases in developing and implementing a successful e-commerce initiative.

PHASE 1-IDENTIFYING THE E-COM-MERCE INITIATIVE AND OBTAINING BUY-IN

First and foremost, the company needs to identify the process, product or business area that is most applicable to an ecommerce initiative and obtain buy-in from internal and external constituencies. Internal constituencies include functional areas, department management and teams that are affected by the initiative. External constituencies include suppliers, vendors and other partners, such as advertising and public relations firms, particularly partners who have systems that must connect or interact with the Web sit or the company's Intranet/Extranet.

An important part of the identification process is examining the resources and skills required to carry out the project from the planning stage through development and implementation. Companies need to determine the skill sets required and identify the skills they already have in-house. Most companies find that they don't have all the skills internally, and must determine the best way to acquire them.

This process involves an analysis of whether to —

- Grow the expertise internally through education or the recruitment of new talent.
- * Outsource some or the entire project to a firm that specializes in Internet technologies and e-commerce.

Senior management, information technology (IT) and other functional areas must buy into the choice of whether to use internal resources, develop new skills internally or outsource some or all of the project. Buy-in on the e-commerce initiative is critical to the success of an e-comerce strategy. Without it, the company may fail to get essential input and support from important constituencies. Participants may have the sense that it's a passing fad rather than a key component of the company's overall business strategy.

As a result, they may not give proper attention to the development and implementation of the e-commerce site. Top management should emphasize the importance of the project and demonstrate the commitment of senior executives throughout the company as well as externally to business partners.

PHASE 2-DEVELOPING A BUSINESS PLAN

Phase 2 involves developing an ecommerce business plan that is integrated with the overall company business strategy. The plan needs to address a number of important issues and concerns, including:—

- * The dynamics of the new marketplace
- * The company's e-commerce goals.
- * A definition of the customer or audience.
- * A 'Requirements for the online marketing campaigh.

- * .Competition.
- * The risks and how to mitigate them.
- * The road map for moving from the strategic level to deployment.
- * Integration of e-commerce systems with other business systems.

DYNAMICS OF THE NEW MARKET PLACE

E-commerce represents a changing revenue model. Not all e-commerce revenue is the result of new customers. Some revenue comes from customers who move from physical channels into the electronic channel. Top management, department managers and business partners—particularly resellers and distributors—need to be aware of this shift and understand how it will affect such areas as performance reviews and sales targets.

COMPANY'S E-COMMERCE GOALS

A company needs to set realistic and achievable goals for the e-commerce initiative and communicate them clearly in the plan. Questions that need to be answered include:

- * What portion of the business will ecommerce represent in 12 months, 2 years and 5 years?
- * What volume of business does the company expect over the next five years?
- * What level of return on investment does the company expect ?
- * How will return on investment be measured?
- * What cost savings can the company realize through e-commerce? Examples might include reduced IT

staffing requirements due to Web-based administration tools and higher productivity through easier access to information or lower customer service costs as a result of facilitating customer self-service.

* Will online sales reduce the sales volumes in existing channels? If so, what will be the impact on each channel?

This information is essential because the site design and support infrastructure must be able to handle growth effortlessly over time. Otherwise, the company may lose valuable time and money re-engineering a site after a few months.

AUDIENCE/CUSTOMER DEFINITION

Defining the audience or customer is one of the primary tasks in the overall scoping and planning of an e-commerce initiative. This includes identifying internal groups, as well as external customers, suppliers, vendors, resellers and other business partners. This element of the overall plan affects many other aspects of the e-commerce system, from site design to online marketing techniques.

REQUIREMENTS FOR ONLINE MAR-KETING

To develop an effective online marketing campaign for the initiative, marketing, advertising and PR personnel as well as site designers need to understand the target audience. Who are they? Where do they spend their time on the Internet? What factors are important to them? The plan should also identify customer needs and expectations as well as how the company and its products or services address needs more effectively than the competition.

COMPETITION

The company's traditional competitors may already have an e-commerce initiative. It's essential to identify what these competitors are doing. Are they aggressively pursuing an e-commerce strategy or are they taking a wait-and-see approach? Are they extending their existing offerings to the new channel or are they creating an entirely new business?

Although current competitors are a threat, nontraditional competitors represent the Biggest competitive risk. These are the companies that find new ways to deconstruct and reconstruct traditional value chains into value webs —-gaining a significant head start over companies that simply move existing business processes to the Internet.

MITIGATING THE RISKS

As with any new business initiative, there are risks and rewards. It is important to identify any risks that could significantly affect the company and provide backup plans to mitigate any negative effects. A company that is building a customer service and support Web site needs to prepare for technical problems, such as interruptions in service from ISPs. Companies need to determine how to respond if a security breach occurs. They also need to investigate attitudes and perceptions in existing channels and minimize channel conflict.

THE ROAD MAP FROM STRATEGY THROUGH DEVELOPMENT

The business plan should provide a road map that defines major milestones as the project moves from the strategic level through the tactical level. The road map should cover the next 12 to 18 months in some detail and provide major milestones

over several years.

INTEGRATION OF E-COMMERCE WITH EXISTING BUSINESS PROCESSES AND PARTNERS

E-commerce is one component of an overall business value chain. It integrates with existing business processes and systems, and should complement existing channels rather than compete with them. It may need to integrate with existing information technology systems, such as inventory, accounting, order processing, & sales forecasting, customer information and Enterprise Resources Planning (ERP) applications. The plan needs to examine the level of integration required and the impact of e-commerce on other process and systems.

The plan also must address the increasingly important requirement to integrate the ecommerce system with the systems of upstream suppliers and downstream partners. In many case, the viability and profitability of e-commerce systems will depend upon the efficiency of value-chainwide system implementations.

PHASE 3—DESIGNING, DEVELOPING AND DEPLOYING THE SYSTEM

A variety of functional groups should participate in the design, development and deployment of an e-commerce system, including marketing, sales, customer service, engineering, operations and information technology. The affected groups need to be intimately involved in the site design to ensure the success of the e-commerce initiative. Representatives from these groups should be part of the project team tasked with design, development and deployment. This team provides the input that drives functionality and design requirements.

BUSINESS ANALYST

DESIGN AND DEVELOPMENT

During the design phase, the company considers technical aspects of integrating the e-commerce system with core business systems. If e-commerce goals require the extension of business systems beyond the firewall to the outside world, security becomes a critical issue in the design and development, to protect sensitive information. Federal Express, for example, makes up-to-the-minute shipment status available to customers online through its Web site. This means exposing its mission-critical package tracking system to the outside world.

In designing, and developing the system, the project team needs to determine specific technologies to be used and identify the best way to integrate the e-commerce system with existing business IT systems. The team also needs to consider the visitor when designing the Web site. The development of navigational cues and the user interface is of critical importance. A good Web design engages visitors, makes it simple for them to navigate the site, and compels them to explore the site further and purchase products.

PILOTING THE SYSTEM

Once the design is complete, the company should conduct a pilot to test its integrity and effectiveness. The pilot provides an opportunity to obtain feedback from functional groups, customers and business partners. It ensures the quality and usability of the site, providing information on:

- * The clarity and effectiveness of navigational cues and user experience.
- Whether or not performance is acceptable.
- * Whether or not integration with other systems is seamless and transparent.

Whether or not the system is scalable and reliable under extreme stress conditions.

BRINGING THE SYSTEM ONLINE

Once the final modifications have been made based on pilot feedback, the company is ready to deploy the site fully. Technical personnel in the IT group typically handle this.

DEVELOPING AN AUDIENCE

With the e-commerce system up and running, the marketing staff takes over the major responsibility for generating site awareness, attracting visitors and fostering customer relationships. The key to e-commerce success is to attract an increasing number of visitors to a Web site and make them repeat customers. To accomplish this, the staff must use a combination of proven audience development techniques that include online advertising, special promotions and PR campaigns that leverage the unique characterstics of the Internet.

Marketing techniques that work effectively in the online arena differ significantly from those that work in the print and broadcast media. Companies must take full advantage of the unique Internet environment, including online communities, promotional tools and cutting edge technologies. They also need to develop a keen appreciation for the subtle complexities of online culture. Companies that recognize these subtleties and leverage the unique nature of the Internet will succeed in their e-commerce efforts. Others risk taking a back seat to more aggressive competitors.

PUTTING THE PROPER SKILLS IN PLACE

Moving into the electronic commerce arena require new skills, knowledge and expertise

in three disciplines: Strategy, technology and creativity.

REQUIRED DISCIPLINES

Strategic planning must be approached in a totally different way because of the dynamic nature of the Internet. Strategy involves a variety of activities, includin:

- * Analyzing existing business processes and identifying areas that can be streamlined and enhanced by Internet technologies.
- Investigating the competition-both traditional and nontraditional competitiors.
- * Developing the business plan.
- * Risk management.

Internet technologies are rapidly evolving, and keeping pace with the new breakthroughs is difficult. Technological expertise involves in-depth understanding of current hardware and software solutions, new technologies, site development, systems integration and security issues.

Creative skills involve more than just basic Web site design. This discipline encompasses the entire user experience—what users see, how they navigate, how they obtain information and how they conduct transactions. It also encompasses the audience development activities that drive traffic to the site.

Marketing and promotional techniques that are effective in traditional media don't always translate well into the online marketplace. The creative area involves understanding the most effective online marketing techniques and applying the ones that make the most sense for the specific product and the audience.

AUGMENTING IN-HOUSE CAPABILITIES

Most businesses don't have in-house expertise in all three disciplines. Developingthem internally may delay e-commerce activities and allow competitors to gain an advantage. As a result, companies that want to move quickly often turn to partners to tap the skills, knowledge and expertise of companies that specialize in launching ecommerce systems. A number of firms--from the big five consulting firms such as Andersen Consulting and Booz Allen to local one-and two-person shops--- are offering e-commerce consulting services that range from planning, design and development to deploying and managing Web sites. Choosing the right firm is essential.

The large consulting firms have significant experience in strategic planning. Their ecommerce offerings typically focus on developing strategic recommendations. These firms, however, may not have the indepth Internet or technological expertise, or the creative capabilities required to take the project through design, development and deployment. Other firms typically focus on either technology or creative capabilities. However, they may not offer the strategic view that so essential to success.

In searching for a partner, companies should look for a firm that can demonstrate extensive experience in all three disciplines. The firm should be capable of taking the ecommerce project through its entire life cycle, from strategic planning to deployment and ongoing operation. This is true even if only a portion of the project is to be outsourced. By choosing a firm with proven strategic, technological and creative abilities, a company can move quickly into the Internet space and achieve greater results—which provides a competitive edge and a faster return on investment.

E-COMMERCE SCENARIOS

There are three main solution scenarios that utilize e-commerce, and there are multiple e-commerce opportunities at each corporation for each solution:

- Online Retailing. This is the traditional business-to-consumer retailing, where a single business sells its wares to the general public, typically over the Internet. Most e-commerce activity to date has been focused in this area.
- 2. Corporate Purchasing. This involves assembling catalog information from multiple suppliers and offering it for purchasing through a unified interface. The "customers" are typically corporate employees, so a requisition/approval/departmental charge process replaces the simple selection/payment process of traditional online retailing.
- 3. Extended Value Chain. This is where corporations purchase supplies and parts from suppliers (other corporations). This scenario has a broader scope than corporate purchasing, since it's intra-business commerce. Some systems like this already exist in propriety Value Added Networks (VANs).

THE ONLINE SHOPPER

While not nearly as popular as the mall, the Internet is rapidly becoming a medium through which consumers can browse and buy. The majority of online shoppers are male (although female shoppers represent an increasing percentage), better educated than the general population, and are in higher income brackets. Most also use the

Internet to get information on products and services. The items they most frequently purchase online are computer-related products, books, clothing, recorded music, gifts, and consumer electronics.

THE POOL IS STILL SMALL, YET IS GROWING EVERY YEAR

Consumers participating in the study said that to keep them buying online or to get them comfortable with the activity in the first place, Internet merchants must, more than anything else, make their sites secure for credit card information and easy to navigate. And yet consumers give online stores mediocre grades on both counts.

THE RISE OF ONLINE SHOPPING

Despite these hurdles, more and more people are shopping online. They are buying a greater range of products and services, spending more, and using the Web as a research tool for an increasing number of purchasing decisions. Some 10% of U.S. household now shop online, up from 7% when we polled consumers a year ago. Another 1% said they were "very interested" in shopping online in the future, while 7% were "somewhat interested."

"A few years ago, retailers could rightly state that the number of consumers connected to the Internet was too small to justify a major investment in cyber shopping capabilities, "That argument, however, no longer holds water today. Consumer connection to the Web increases significantly each year, and now is just too influential for growth-oriented merchants to ignore.