10.1 Emerging trends in e-commerce

As the first wave of e-commerce is in ebb around the world, the far-sighted are using the opportunity to learn from history and position themselves best for the future—a future likely to be marked with sustained but sober growth in e-commerce activities and increasing worldwide use of the Internet. Some use the term “Netphase I” to describe the roller-coaster e-commerce experience of the past decade, a prelude to the more restrained and mature “Netphase II” that is gathering force today. However, the heady days of the first wave have taught some important lessons to entrepreneurs and investors alike—a few clear trends in e-commerce are emerging in the world which will assist the prediction of trends in India.

The web is becoming increasingly international
If one thing is clear after the first decade of the Internet, it is the fact that the USA, the birthplace and hub of all e-commerce activities, will not be leading the growth in e-commerce in the next few years. Many believe that while the USA will still see a steady rise in e-commerce activities, such growth is likely to be dwarfed by the action in other countries. Europe, Japan and particularly the Asian countries are expected to be the hothouse of e-commerce growth in the next few years.

As the reach and use of the Internet becomes increasingly global, it will also become increasingly multi-lingual. English is projected to lose its status as the principal language of the Internet in the next decade. By 2007 Chinese is expected to become the most used language on the Web—as it is in the real world. This phenomenon of multi-lingualism on the Web would clearly have important consequences for both B2C and B2B sites as they can now reach out to segments of their markets that were previously out of reach owing to linguistic barriers.

Also, as the web and e-commerce become more international, the issue of cross-border online trade will become more important. National markets will become more and more open to international online competition. Governments worldwide will find it increasingly difficult to
pursue isolationist, protective policies, as it is far more difficult to monitor activities and enforce protective legislations in an online environment.

However, the fact that the Internet will become increasingly global does not in itself mean that national borders would cease to be effective. Presently, national borders continue to impose barriers to international e-commerce, particularly B2C E-commerce, mainly through significantly higher trans-border shipping and transportation charges. As long as these trans-border charges do not decline, international e-commerce will be limited in its impact. These charges, in turn, depend on several factors, few of which would get reduced directly by the application of web-based technology.

Consolidation is on the cards
While the Internet and e-commerce may be poised for growth in the medium and long term, the bursting of the bubble in the first phase will lead to significant consolidation in the short term. The Internet boom in the late 90s led to a massive investment spree around the world, causing a build-up of significant over-capacity in almost every segment of e-commerce in most countries around the world. Given the nature of the medium and the growth rates of actual sales as opposed to the broader Internet use figures, there is no room for the number of e-commerce ventures that set up shop in the late 90s to be simultaneously profitable.

As e-commerce companies around the world go down in the aftermath of the worldwide dotcom meltdown, the process actually strengthens the survivors by eliminating fringe players. Merger and acquisition activity in the e-commerce area is already becoming more and more popular as the more resourceful companies snap up less fortunate competitors at bargain prices. While this may appear to be a negative trend for the e-commerce sector in the short run, it is actually a strengthening feature from a long-term perspective.

In a broad sense, the current worldwide state of affairs in e-commerce is that of Darwinian survivalist evolution. As weaker firms fold up, they create more breathing space and resources for the inherently viable companies. Of course the process of elimination is far from perfect and some good companies may also exit with the less viable ones. The e-commerce firms that can identify and aggressively acquire these companies will profit significantly from the resulting resources and synergy.
E-commerce growth is not the same as internet growth

Among the main lessons that the experience of last few years has taught us is the fact that there is significant difference between Internet use and e-commerce revenue potential. Simply because the Internet is going to make inroads into remote corners of the world and bring new customer segments online does not mean that every new Internet user is equally likely to make online purchases.

The distinction is crucial for e-commerce companies when it comes to making future sales projections – an estimate that lies at the heart of any business. Both entrepreneurs and financiers ought to be more conservative than they have been in the past in jumping from Internet use statistics to potential sales figures. Several factors, including the difficult-to-quantify cultural factors, must be considered in estimating the willingness of visitors to a site to actually make payments for goods in an online environment.

Advertising cannot pay for everything

Most of the portals and search engine sites developed in the last few years have been built on the assumption that as they get a large number of visitors, advertisement revenue from the site would turn the venture profitable. That has not, in general, been the case. Advertisement on the Internet has been and will continue to be significant but not enough to sustain more than a few portal and news media sites.

General interest sites, not particularly targeted at visitors of any specific kind, are unlikely to get enough advertisement at profitable rates to keep them going. The economics of online advertisement and the financial arrangements are still in a formative stage and banner ads continue to have very low conversion rates. Consequently, advertisers are becoming increasingly selective about how much banner advertisement to put on the web and how much to pay for it.

As a result, portal sites and search engines are witnessing a significant amount of consolidation activity in the form of acquisitions as well as exit by the weaker sites. A large number of visitors per se is no longer a passport to venture capital financing. A clear path to profitability will be crucial in this area as in any other. An important element of a successful strategy therefore would be keeping costs within bounds, to match the lower advertising revenue anticipated.
Margins will be razor thin and logistics will win the day

Even after a decade of existence, most e-commerce businesses have relatively low costs of entry in terms of web technology. Also, web shoppers are proving to be among the best bargain hunters in the world, if only for the ease of comparison-shopping on the Internet. Consequently, margins in web businesses are getting thinner. This, together with growing competition, means that survival depends crucially on market share and cost reduction. Even though total market size will continue to expand for most e-businesses, it does not necessarily mean that the market for all existing businesses and the hopeful entrants will continue to support less than efficient operations. What the thin margins necessitate, therefore, is that there be no flab in the operations of e-businesses.

Ultimately, e-business will be a severe and strict arena where every penny will matter and only the companies with most efficient back-room operations in terms of fulfilling orders and keeping overheads to a minimum will win the day.

Brand is invaluable on the internet and trust is the key to brand building

As millions of web pages jostle for the consumer’s attention, only a few top sites are getting most of the hits while the vast majority languish in oblivion. The web is not a place where ‘some offer’ will get you ‘some business’. Success is absolutely non-linear and the winners would take all or most of the potential revenue while the rest will soon go under.

The only way to catapult an e-business among potential winners is through the traditional device of brand building and brand management. As in the offline world, online brands are also reserved slots in the minds of the potential customers and this keeps bringing them back to these favoured sites.

Brand building and brand management on the Internet, however, is quite a different proposition from that in the offline situation though the general principles continue to be the same. News travels much faster over the Net than off it, and a single public relations fiasco can drive hosts of online customers away. A large part of the brand consists of the customer’s perception of the seller’s quality, integrity and reliability — in a word “trust”. Established offline brands enjoy a clear edge in the online battle for customer attention and acceptance, precisely because customers trust them. As a result, building successful online brands demands creating trust among customers by providing prompt, quality customer service over absolutely secure online sites. E-businesses should take it upon themselves to make the
shopper's online experience as risk-free as possible. Learning by the proverbial *caveat emptor* principle in the online environment is a prescription for disaster.

**Old practices will not change overnight, but will evolve over time**

As the web enters its second decade, one thing is becoming increasingly clear – the revolutionary impact of the web is present but not to the degree promised. While the Internet and e-commerce are indeed changing the way business is done around the world, it does not mean that all the old business models should be thrown away. At its heart, the web is a revolutionary communication medium and it is changing the way information flows within business organizations and between such organizations and their external constituents.

Clearly the biggest impact of the web will occur in areas where information flow is most crucial - e.g. financial services and auctions. Such areas are rapidly changing to adapt themselves to the challenges and opportunities of the Web. In most other businesses, however, the change is happening at a pace much slower than initially predicted. Businesses and customers alike are exhibiting a cautious inertia before boarding the bandwagon of new technology in every area. Consequently, e-businesses banking on bold and 'revolutionary' predictions must think before they make the first move.

**The potential of the web has to be utilized imaginatively and creatively**

As in every other area of business, success in e-business will come not necessarily to those who are the most technologically savvy but to those with creativity and imagination who can understand the potential of the Internet and apply it to new situations. It took years after the introduction of railways for businesses to use their power to get suppliers from far-off places and market their wares in distant places. This was because even though technology had removed the causes of localization, the age-old mindset of locating steel mills next to iron-ore took years to go away. For years after the introduction of TV, most programmes were readings and discussions – as on the radio.

Thus the popular mindset takes far longer to change than technology, and profits come to those who are the first to realize the potential of new technology and apply it creatively to harness that potential. When it comes to e-commerce, it is far from true that most potentialities of the Web have been discovered and harnessed. It is very likely that significant goldmines lie undiscovered. But as in many other cases, finders are keepers. There is little
room for copycat strategies. Creativity and ability to think out of the box can therefore still generate significant profit opportunities.

Turban\(^2\) has also thrown some light on the trends and observations in the future of e-commerce. According to him, there is a consensus that the future of EC is bright. There are differences regarding the anticipated growth rate and the identification of industry segments that will grow the fastest. Such optimism is based on the following trends and observations:

**Internet use**

The number of internet users is increasing exponentially. With the integration of computers and television, cheaper PCs, increased availability of access kiosks, and increased publicity, there will be more and more Net surfers. As younger people grow, the usage will grow even further. There is no question that sooner or later there will be a billion people who surf the Net.

**Opportunities for buying**

The number of products and services available on the Net is increasing rapidly with improved trading mechanisms, intermediary services, presentation in multiple languages, and sellers’ willingness to give it a try. It is logical to expect significantly more purchasing opportunities. Several websites are reporting 15 to 25\% monthly increases in sales.

**Purchasing incentives**

The buyer’s advantages are likely to increase. Prices will go down further, and the purchasing process will be streamlined. Many innovative options will be available, and electronic shopping may even become a social trend.

**Increased security and trust**

One of the major inhibitors of B2C growth is the perception of poor security and privacy, and lack of trust. As time passes significant improvements are expected in all these areas.

**Efficient information handling**

Much information will become accessible in real time. Using data warehouses and intelligent agents, companies can constantly learn about their customers, steering marketing and service activities accordingly. The notion of real-time marketing might not be so far away. This will facilitate the use of EC.
Innovative organizations
Organizations are being restructured and reengineered with the help of IT. Using different types of empowered teams, some of which are virtual, organizations become innovative, flexible, and responsive. The trend for process reengineering is increasing and so is organizational creativity. Innovative organizations will probably be more inclined to use EC.

Virtual communities
Virtual communities of all kinds are spreading rapidly with some already reaching several million members. These can enhance commercial activities online. Also, some communities are organized around professional areas of interest and can facilitate B2B commerce.

Payment systems
The ability to use e-cash cards and make micro payments is getting close to reality; when implemented on a large scale, many EC activities will flourish. As international standards become the norm, electronic payments will extend globally, facilitating global EC.

Business-to-Business
Figures about the growth of B2B are being frequently revised. In some cases industry-type extranets are almost forcing everyone to participate. B2B will continue to dominate the field (in terms of volume traded) for the intermediate future. There will be more sellers, more buyers, more services; rapid growth will continue. The success of B2B (as well as B2C) will depend upon the success of integrating EC technology with business processes and with conventional information systems.

Technology trends
The trend in EC technologies generally points toward significant cost reduction coupled with improvement in capabilities, ease of use, increased availability of software, ease of site development, and improved security and accessibility. Some specifics follow:

- Clients. PCs all types are getting cheaper, smaller and more powerful. Another major trend is the movement toward embedded clients. A microchip, in such a case, can be a car or a washing machine with an embedded microchip. In many case, an expert system is embedded with rules that make the client “smarter” or more responsive to changes in the environment.

- Servers. A major trend is to move to Windows NT as the enterprise operating system. Among NT’s capabilities is provision of clustering. Clustering servers can add processing
power in much smaller increments than was previously possible, and are very economical, resulting in cost reduction.

Networks. The use of EC frequently requires rich multimedia (such as color catalogues or providing samples of movies or music). A large bandwidth is required to accomplish this. Several broadband technologies (such as XDSL) will increase bandwidth manifold. This could help in replacing expensive WANs or VANs by the inexpensive Internet. Security on the Internet can be enhanced by the use of VPNs.

EC software and services. The availability of a variety of EC software will make it easier to establish stores on the internet and to conduct all kinds of trade. Already hundreds of sites offer pages for inexpensive rent for a variety of activities ranging from conducting your own auctions and bids to selling in a foreign language. Other support services, such as escrow companies that support auctions and multiple certifications, are developing rapidly. Also, a large number of consultants are being trained to assist in specialty areas.

EC knowledge. Being a new phenomenon, EC includes many uncertain and unknown aspects. However, as time passes the quantity and quality of related knowledge is increasing rapidly. The more we know about EC the more we can facilitate its expansion, which, in our opinion, is grossly under-estimated.

Integration. The forthcoming integration of the computer and the TV, and the computer and the telephone, including cellular phones, will increase accessibility to the internet (see Silverman 1999). 3

Many people conclude 4 that the impact of EC on our life will be as much as, and possibly more than, that of the Industrial Revolution. No other phenomenon since the Industrial Revolution has been classified in this category.
10.2 The future of e-commerce in India

Whatever may be the reality, the fact is that e-commerce has a lot of potential. In fact the rate of growth of Internet users has encouraged many companies to play active roles. “The number of Internet users is expected to grow at a pace of over 300 per cent over the next few years,” says Dinesh Agarwal, owner of India Mart, a company engaged in spearheading the ‘Business through Internet’ revolution in India. The company provides a wide spectrum of services in all phases of implementation and integration of the Internet with present day business requirements.

Sanjeev Ranjan, a software marketing consultant is also optimistic about the potential of e-commerce in India. “We are quite fast at adopting ourselves to new technology and there’s no reason why e-commerce will not become popular here,” he says. There are reasons to believe that local vendors will try and popularize e-com in India “because financially they will be comfortable anyway,” adds Ranjan. With the online payment option not being directly available in India, it is the other side of business to B2B e-commerce where we will see a lot of growth in the coming months. A few examples could be an online bulk ordering system through websites, used by retailers to order goods from their principals.

Savita Arya Thakur, project manager, Compunnel Software opines: “Things are changing at a phenomenal rate and we may soon hit the jackpot,” she exults, adding that “Internet is catching up the imagination of many businesses, small and big. There are many unexplored areas like garments exports where we can do a lot of e-commerce, and I am quite optimistic about it.” Thakur’s company, for instance is engaged in developing a lot of Internet and multimedia solutions, besides software development with a key focus on the garments industry.

An important factor in the popularity of e-commerce is the role played by the government. The new government’s resolve to create a separate IT Ministry along with the move to draft new policies regulating Internet policies in India are welcome step, for as soon as it happens, it would boost the growth of e-commerce.

Business Standard\(^5\) published a report on the future of e-commerce in India during 2002, when the economy was facing a slowdown. The overall message of the report was very
positive. It stated that despite the slowdown, Internet and online services were poised to grow, and India would be one of the main beneficiaries.

The UNCTAD report E-commerce and Development makes the point that although world economic growth has slowed, and despite the difficulties in which the IT and telecom sectors are mired, the rapid growth of Internet use and e-commerce continues.

Estimates show that Internet use is increasing by around 30% annually, and although the rate of growth of transactions through it is much slower, e-commerce could represent up to 18% of worldwide B2B and retail transactions in 2006.

While more pessimistic forecasts peg their projections at barely a third of that figure, the fact is that the volume of online transactions is increasing. Segments such as B2B have shown rapid growth. And in certain sectors, such as finance, travel services, software, information and other e-services, online transactions have been growing much faster. For instance, in the developed countries, online banking already represents between 5 and 10% of total retail banking transactions.

Much of the growth has occurred in Asia. The region's export-oriented economies, particularly in manufacturing, are exposed to pressure from customers in developed countries to adopt e-business methods. China's population of Internet users is already the world's third largest, and is growing much faster than India's. China's going online may lead to yet another source of competitive advantage for that country as e-business tools for procurement, inventory and supply chain operations are used to improve productivity for its already formidable enterprises. This has important implications for India's manufacturing sector, and it is important that policies that provide an environment for encouraging e-commerce are adopted.

As the Report points out, e-finance and e-commerce will succeed only if they create a stable physical and virtual infrastructure of trust. But it is equally important to localise existing software and make the right decisions about the kind of software to be purchased (whether proprietary or open source) for the benefit of the local business sector and the government.

That said, there are areas in which India has excelled, and which provide a continuing opportunity. IT and e-services are the obvious examples of this.
Computer-related software exports constitute one of the dynamic export services, and the rate of growth for the developing countries in 1999 and 2000 was 58%. The Report classifies India as a 'rising star' in this regard, pointing out that its IT services exports have almost doubled in two years and now account for more than 16% of total exports and 8% of all foreign exchange earnings. Given the extraordinary growth rates of e-services exports, the latter figure is expected to reach 30% by 2008. Policy measures to support exporters of e-services should focus on increasing market access in e-services for exporters from the developing countries, as well as on addressing domestic obstacles related to technology, payments, infrastructure (telecommunications) and standards.

But the overall message of the Report is very positive. Despite the current slowdown, the Internet and online services are poised to grow, and India will be one of the main beneficiaries.

Predictions for 2006 from an Indian Perspective 6

(Filed under General, Innovation in India, Software, Media, U S., ecommerce, Society, Web, Search on Dec 13, 2005)

1. **The Web 2.0 bubble will burst:** This will happen for two reasons. Firstly, it will become clear that most, if not all, Web 2.0 sites have been unable to reach out beyond the very limited geek-dominated market of early adopters (illustration: even the supposedly wildly popular del.icio.us service has just 300,000 users. An anecdotal review of the popular links on del.icio.us will reveal this as well). Secondly, the acquisition spree seen in 2005 will slow down as the big players digest their acquisitions of 2005 and re-evaluate some of their more outlandish purchases (Skype comes to mind). This time, though, the bubble will burst quietly with websites getting shut down without much buzz. Not too many employees will be displaced as Web 2.0 startups have hired very sparingly.

2. **Yahoo will continue its upswing:** Yahoo will continue to make mindshare inroads into Google’s territory because of its superior partnering strategies (e.g. its recent partnership with Six Apart for MovableType) and also the fact that Yahoo “gets” content much more than Google does (also see prediction #8 below). Towards the end of 2006, Yahoo will start to emerge as a bigger threat to Microsoft than Google.

3. **Outsourcing:** A shortage of good tech workers, an unsustainable spree of pay hikes and continuing competition from companies like Accenture and IBM will start impacting the
major Indian outsourcing companies. Also, 2005 has seen a trickle of good engineers leaving big Indian IT companies to join startup technology companies. 2006 will see a flood. Startups in India will have a good hiring year.

4. **The blogosphere expands and consolidates**: Professional, political and passionate bloggers will continue to see a fast growth in their readership. Overall the blogosphere will start to consolidate attention and resources into a relatively few trusted blogs. “me-too” bloggers will start to drop off the blogosphere, as the novelty of blogging wears off. With the decline of me-too bloggers, advertising-driven blogging sites will start to see a decline in growth rate. The absolute number of bloggers will still see a sharp increase over 2005 (the number of blogs could possibly reach 150 million).

5. **Resurgence of newspapers**: 2006 will be the year newspapers make a big comeback. This comeback will be led by a few simple but powerful trends. Firstly, newspapers will increasingly recruit subject specialist bloggers and *hyperlocal bloggers* over more generalist journalists. This will allow them to replace boring newsspeak with more insightful articles from writers whom people already know and trust. Secondly, a readership weary of the tedium of keeping track of too many blogs will return to the comfort of reading newspapers (albeit online). Whether newspapers can successfully monetize this new interest will be the next big question.

6. **Consumer storage will be hot**: As the average consumer continues to amass gigabytes of data, the storage, backup and disaster recovery problem will become critical. The year 2006 will see several technologies that were hitherto reserved for mission-critical IT networks retargeted towards individual users and small businesses.

7. **Major breakthrough in the attention problem**: As companies and individuals slowly start to realize that they are losing productivity because of too many interrupts (email, IM, phone calls), a major breakthrough technology will alleviate the problem to a large extent.

8. **Content will become more valuable**: Due to several factors (such as Google’s algorithm-driven approach to ranking relevancy and the Web 2.0 bubble), content in 2005 was being treated as a mere commodity. 2006 will start to see a reversal of this trend, as content creators (e.g. bloggers, photographers and musicians) get a more equitable share of online advertising revenues. This trend will be driven by a simple consumer behaviour – consumers prefer better content over better technology or delivery mechanisms. This inherently means that content needs to be valued higher than it currently is.

9. **US real-estate slowdown will have global consequences**: Interest rates, US bond prices, US consumer confidence, dollar exchange rates (and hence the offshoring business), combined with the huge (and increasing) US trade deficit are all pieces of a fragile
domino game. This game could easily turn ugly if the US real estate market accelerates its slowdown, or even worse, turns out to be a bubble. Bad news in this market could trigger a global recession.

10. Uncertainty in China will cause investors to hedge bets: The risk of social unrest will weigh on the minds of investors in China. The heavy handed approach of the Chinese government might provide stability in the short term, but it still risks the chaos of possible widespread unrest in the medium term. Whether India will gain from this is unclear. Investors might look at even safer bets such as Eastern Europe, South America and South Africa.

The Indian diaspora is spread across the world from Silicon Valley and Sydney to Singapore and Southall, and its strong community ties have led to global audiences for content offerings as well as interlinked networks of venture capital and a superb flair for collective international Netrepreneurship.

India's cutting-edge competitive infotech and design skills are leading growing numbers of US, European and Australian companies to outsource much of their software development and even customer service to companies based halfway round the world in India.

Indians in the U.S. – like Vinod Khosla (co-founder of Sun Microsystems), C.K. Prahlad (Management Studies guru at Harvard Business School), Ravi Kalakota (E-commerce Professor at the University of Texas in Austin), Rajat Gupta (CEO of McKinsey Consulting), Gunjan Sinha (founder of eGain), Gururaj Deshpande (founder of Juniper Networks), Sandeep Sidhu (founder of i2 Technologies), Kanwal Rekhi (former CTO of Novell Networks), Sabeer Bhatia (founder of Hotmail), Rakesh Mathur (co-founder of Junglee) and Rohit Chandra (founder of eCode) – have been making quite a mark in the computer, Internet, academic, and business fields in the US They are now forging new links with their home country for the New Economy – turning a “brain drain” into a “brain bank.”

Mukund K. has written an article on Future of E-Commerce in India. According to him, the joining of commerce and Internet technology has proven to be profitable for both businesses and consumers. The benefits brought on by e-commerce are likely increase and become more beneficial to those who choose to take advantage of its many offerings. There are some obstacles that will have to be overcome before this market can realise its full potential. E-commerce is not likely to replace physical stores anytime soon, but it will allow consumers...
and businesses to take advantage of a new experience. Internet business will continue to prosper and grow for many years in the future. It is estimated that every month, one million new Internet users join the growing online global community.

Realising the strategic importance of IT for the country, the Indian government has set itself an ambitious target of making India a global IT power and a key contributor to the world IT industry by 2008. In 1998, a National IT Task Force was set up and a National IT Policy formulated. The policy calls for raising the software industry's turnover to USD 85 bn by 2008, 50 bn of this is expected to come from exports. It also proposes to strengthen the country's human infrastructure through the establishment of an Indian Institute of Information Technology or IIIT in every state. Eager to climb up the value chain, the Indian IT industry is at present aggressively pursuing two hot segments: e-commerce and IT-enabled services. The worldwide ITES market is poised to grow from the present USD 10 bn to USD 180 bn by 2010. According to NASSCOM, 25,000 Indians are currently employed in remote services. McKinsey & Company thinks that this number will rise to 1 mn to 3 mn people within ten years.

PC Quest indicates signifies that declining costs, increasing functionality and the use of access devices like PCs connected to the Internet and Web-enabled mobile phones, the declining price of Web servers, advances in programming technologies and technologies that simplify use of computers by ordinary people, will drive the changes in e-commerce and define its future. Here are some of the changes that we can anticipate today:

Location-based marketing: Currently e-Commerce is synonymous with PC and browser-based interaction. However, in the near future Web-enabled mobile phones and other handheld devices will become a common, if not dominant mode of accessing e-commerce applications. Commerce applications will by then evolve to track the location of mobile consumers using GPS. The location information will then be used to guide the consumers to nearby stores. If the consumer requests a service, say a taxi, drivers in the vicinity can be alerted.

Natural language interfaces: In developing countries PC penetration in homes is likely to stay below that of developed countries with a large part of the population still unfamiliar with the Web. To reach the masses, commerce applications will have to rely on mobile phones, handheld devices and kiosks. Speech-based natural language interface is the logical choice and e-commerce applications will adopt these interfaces. The e-commerce applications will
also exploit the ability of computers to translate text from one language to another to simplify the deployment of the applications in multiple languages, a desirable thing for countries like India with several languages.

**Consumer preferences and interests:** Even though the Internet makes it possible to search through a very large collection of items, searches require effort and consumers stop their search before reaching the optimal selection. Data-mining techniques applied to past purchase histories and browsing patterns will allow e-commerce systems to learn the preferences and interests of consumers. E-commerce sites will thus show advertisements and sales promotions relevant or applicable to a particular customer.

**Moving on to the Internet:** It is reasonable to believe that the prevailing commerce process is in a state where changes that increase their complexity cost more than the additional profits they result in, or the decreases in complexity reduce costs less than the lost profitability. As parts of the commerce processes move to the Internet, the costs are reduced and benefits change. One of the Internet’s important benefits is its ability to reach a wide consumer audience. As a result e-commerce processes will change to reach a new equilibrium point, perhaps become more elaborate to increase the mutual benefits for the market participants, creating a more efficient market. For example, stores may liquidate their inventories through online auctions rather than aggressive price reductions.

**Barter and government presence:** Reservations for air or train travel, or hotel bookings, are classic examples of existing commerce activities that have moved online to take advantage of reduced costs and increased reach. However, more exciting are the opportunities that can be imagined in the future -- examples not seen today such as barter of second hand books or music, regional markets for second-hand automobiles etc. Government regulations require its own commerce activities to be widely publicized and open to public scrutiny. Internet achieves this objective at low cost and therefore government procurement and sales can also be expected to move online.

The **2005 Country Progress Report** of India has thrown some light on the future of e-commerce:

**Electronic Commerce (EC)/Electronic Data Interchange (EDI) users**

With the increased level of consumer comfort with online functions like e-mail, internet etc. a
higher level of participation in e-commerce is assured. The escalating growth of Web-based businesses is leading to e-commerce both B2B and B2C. The next five years will see large growth in e-commerce that would positively impact small businesses that have established themselves as legitimate, trustworthy merchants. Most companies have recognized that they need to create and execute an e-commerce strategy.

The industry association has indicated that despite a larger base, the Indian software and services industry has been able to maintain its growth momentum and delivered better-than-expected results. Software exports, the mainstay of the industry, grossed USD 12 bn in FY 2004-05, up from USD 9.2 bn in 2003-04, indicating growth of 30.4% for the year.

EC market size and growth
A recent survey by an Indian research organization finds that more and more Indian Internet users are opening their wallets online. The report finds there are currently more than 4.2 mn shoppers online in India.

The emergence of low cost airlines and online ticket booking along with growth in online railway reservation will drive the e-Commerce boom in 2005-06. E-commerce is expected to clock a growth of over 60% of the USD 227 mn transactions. In 2004-05, 63% of online revenue was generated between airlines and railway ticketing amounting to over USD 79 mn.

The telecom sector which was growing in the range of 22-25% till 2002-03 has shifted to a higher growth path in the range of 35–40%. The total number of phones reached 92.9 mn on December 31, 2004.

In the broadband policy announced in October 2004, the main emphasis is on the creation of infrastructure through various technologies that can contribute to the growth of broadband services. These technologies include optical fibre, asymmetric digital subscriber lines (ADSL), cable TV network, DTH etc. It is estimated that the number of broadband subscribers would be 3 mn by 2005, 9 mn by 2007, and 20 mn by 2010.

eBay bets on Indian prospects
India is an early stage market in terms of Internet penetration and only relatively recently has it gained critical mass. However, in terms of growth prospects for e-commerce, eBay, the global giant, expects India to be among the fastest growing markets. Meg Whitman, President
and CEO, eBay Inc. opines, “For e-commerce, India is among the fastest growing markets but
that is from a small base. In 2006, we expect India to be among the top three globally in terms
growth for eBay and certainly the top in the Asia Pacific region.” According to her, “India’s
booming economy is fuelling the growth of Internet and, especially, e-commerce. The
changing consumer behaviour and growing adoption of Internet will help create more
opportunities for young Indian entrepreneurs in the online world in India and around the
globe. Most countries are trying to create a hospitable environment for e-commerce and
therefore, IT legislation and IT laws are conducive for that in India. It is important to have
connectivity and broadband.”

It is a fact that in line with global trends, Indians have finally started shopping online
enthusiastically. For instance, according to a yet another e-commerce study conducted by
IAMAI, the online shopping market in India rose from about USD 11 mn in 1999-2000 to
about USD 58 mn in 2003-04, and was slated to grow to more than USD 522 mn by end of
March 2007.

There is no doubt that e-commerce is growing at a rapid pace in India. As per the latest
IAMAI data, e-commerce turnover was estimated at Rs. 1,180 crore in ’05-06 and is expected
to increase almost 100% to Rs 2,300 crore in ’06-07.

To sum up, the use of e-commerce, which primarily refers to buying, selling, marketing and
servicing of products or services over the Internet and other computer networks, has taken off
in India. Though not big enough currently compared to peer markets, it is expected to grow in
the near future to a size of Rs. 2300 crore by 2007 against the Rs. 1200 crore. The total
number of internet users – which right now is 38.5 mn – is expected to reach 100 mn by
2008.

Conclusion

E-commerce has taken the business world by storm. It is creating an entire new economy,
which has a huge potential and is fundamentally changing the way businesses are conducted.
It has advantages for both buyers and sellers and this win-win situation is at the core of its
phenomenal rise. Although there are some weak links, with improvements in technology they
will be ironed out, making e-commerce easy, convenient and secure. It is certainly here to
stay.
REFERENCES

CHAPTER 10

6. “An Indian Perspective on technology innovation, media and society”, by a Silicon valley software professional, alumni of Washington University, Pune Institute of Computer Technology. Source: http://mungee.org/archives/category/ecommerce
7. Idib