CHAPTER 5

EMERGING MODES OF BUSINESS

LEARNING OBJECTIVES

After studying this chapter, you should be able to:

- state the meaning of e-business;
- explain the process of online buying and selling as a part of e-business;
- distinguish e-business from traditional business;
- state benefits of switching over to electronic mode;
- explain requirements for a firm's initiation into e-business;
- identify major security concerns of electronic mode of doing business;
- discuss the need for business process outsourcing; and
- appreciate the scope of business process outsourcing.

"Let us do some shopping," Rita woke up Rekha, her friend from the home-village who had come to Delhi during the vacations. "At this hour well past midnight," said Rekha rubbing her eyes, "Who would be sitting with his shop open for you?" "Oh! Perhaps I could not convey it properly. We are not going anywhere! I am talking about online shopping over the internet!" told Rita. "Oh yes! I have heard of online shopping, but have never done any," Rekha said, "What would they be selling over the internet, how will they deliver, What about payment... and why is it that internet has not yet become as popular in the villages? As Rekha was grappling with these questions, Rita had already logged on to one of India's largest online shopping mall.

5.1 Introduction

The way business is done has undergone fundamental changes during the last decade or so. The manner of conducting business is referred to as the 'mode of business,' and, the prefix 'emerging' underlines the fact, that these changes are happening here and now, and, that these trends are likely to continue. In fact, if one were to list the three strongest trends that are shaping business, these would be: (i) digitisation — the conversion of text, sound, images, video, and other content into a series of ones and zeroes that can be transmitted electronically, (ii) outsourcing, and, (iii) internationalisation and globalisation. You will read about international business in Chapter 11. In this chapter, we will be familiarising you with the first two developments, i.e., digitisation (a term from electronics) of business — also referred to as electronic business (e-business), and Business Process Outsourcing (BPO). Before we do so, a brief discussion about the factors responsible for these two new modes of business would be in order.

The newer modes of business are not new business. These are rather simply the new ways of doing business attributable to a number of factors. You are aware that business as an activity is aimed at creating utilities or value in the form of goods and services which the household and industrial buyers purchase for meeting their needs and wants. In an effort to improve the business processes — be it purchase and production, marketing, finance or human resources business managers and business thinkers keep evolving newer and better ways of doing things. Business firms have to strengthen their capabilities of creating utilities and delivering value to successfully meet the competitive pressures and ever-growing demands of consumers for better quality, lower prices, speedier deliveries and better customer care. Besides, the quest for benefitting from emerging technologies means that business as an activity keeps evolving.

5.2 e-Business

If the term business is taken to mean a wide range of activities comprising industry, trade and commerce; e-business may be defined as the conduct of industry, trade and commerce using the computer networks. The network you are most familiar with as a student or consumer is the internet. Whereas internet is a public thorough way, firms use more private, and, hence more secure networks for more effective and efficient management of their internal functions.

e-business versus e-commerce: Though, many a times, the terms e-business and e-commerce are used interchangeably, yet more precise definitions would distinguish between the two. Just as the term 'business' is a broader term than 'commerce', e-business is a more elaborate term and comprises various business transactions and functions conducted electronically, including the more popular gamut of transactions called 'e-commerce.' e-commerce covers a firm's interactions with its customers and suppliers over the internet. e-business includes not only e-commerce, but also other electronically conducted business functions such as production, inventory management, product development, accounting and finance and human resource management. e-business is, therefore, clearly much more than buying and selling over the internet, i.e., e-commerce.

5.2.1 Scope of e-Business

We have mentioned above that the scope of e-business is quite vast. Almost all types of business functions such as production, finance, marketing and personnel administration as well

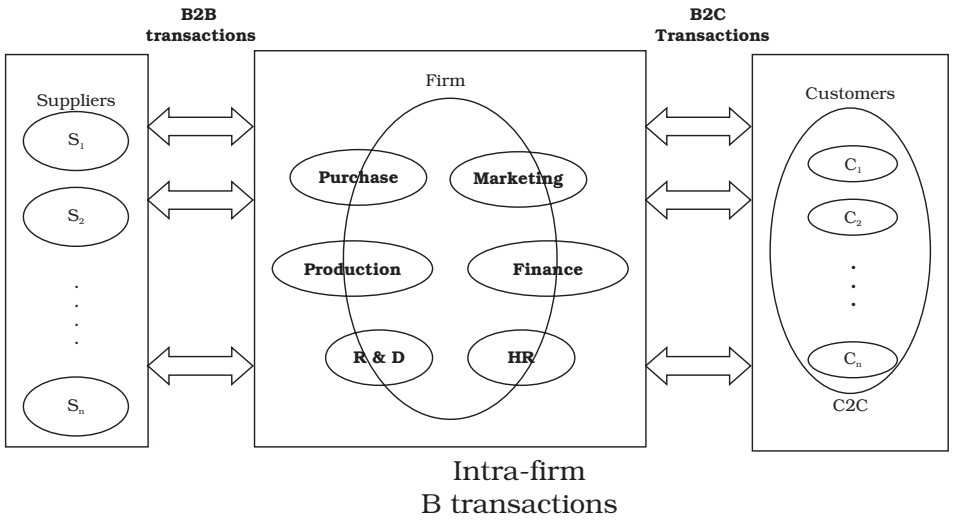


Figure 5.1 Firm as a link between Network of Suppliers and Customers

as managerial activities like planning, organising and controlling can be carried out over computer networks. The other way of looking at the scope of e-business is to examine it in terms of people or parties involved in electronic transactions. Viewed from this perspective, a firm's electronic transactions and networks can be visualised as extending into three directions viz., (i) B2B which is a firm's interactions with other businesses, (ii) B2C i.e., a firm's interactions with its customers and (iii) intra-B or a firm's internal processes.

Figure 5.1 summarises the network of parties and interactions that comprises e-business.

A brief discussion of various constituents of e-business and inter- and intra-transactions among them is given as below:

(i) B2B Commerce: Here, both the parties involved in e-commerce transactions are business firms, and, hence the name B2B, i.e., business-to-business. Creation of utilities or delivering value requires a business to interact with a number of other business firms which may be suppliers or vendors of diverse inputs; or else they may be a part of the channel through which a firm distributes its products to the consumers. For example, the manufacture of an automobile requires assembly of a large number of components which in turn are being manufactured elsewhere — within the vicinity of the automobile factory or even overseas. To reduce dependence on a single supplier, the automobile factory has to cultivate more than one vendor for each of the components. A network of computers is used for placing orders, monitoring production and delivery of components, and making payments. Likewise, a firm may strengthen and improve its distribution system by exercising a real time (as it happens) control over its stock-in-transit as well as that with different middlemen in different locations. For example, each consignment of goods from a warehouse and the stock-at-hand can be monitored and replenishments and reinforcements can be set in motion as and when needed. Or else, a customer's specifications may be routed through the dealers to the factory and fed into the manufacturing system for customised production. Use of e-commerce expedites the movement of the information and documents; and of late, money transfers as well.

Historically, the term e-commerce originally meant facilitation of B2B transactions using Electronic Data Interchange (EDI) technology to send and receive commercial documents like purchase orders or invoices.

(ii) B2C Commerce: As the name implies, B2C (business-to-customers) transactions have business firms at one end and its customers on the other end. Although, what comes to one's mind instantaneously is online shopping, it must be appreciated that 'selling' is the outcome of the marketing process. And, marketing begins well before a product is offered for sale and continues even after the product has

History of e-commerce

e-commerce began before personal computers were prevalent and has grown into a multi-billion dollar industry, but where did it come from? By looking at the evolution of e-commerce, it will be easier to judge its trends for the future.

Year	Event
1984	EDI, or electronic data interchange, was standardised through ASC X12.* This guaranteed that companies would be able to complete transactions with one another reliably.
1992	'Compuserve' offers online retail products to its customers. This gives people the first chance to buy things off their computer.
1994	Netscape arrived. Providing users a simple browser** to surf the internet and a safe online transaction technology called Secure Sockets Layer.***
1995	Two of the biggest names in e-commerce are launched: Amazon.com and e-Bay dot. com
1998	DSL, or Digital Subscriber Line, provides fast, always-on Internet service to subscribers across California. This prompts people to spend more time, and money, online.
1999	Retail spending over the Internet reaches $20 billion, according to Business.com.
2000	The U.S government extended the moratorium on internet taxes until at least 2005.

Source: *Glossary of e-commerce Terms, http://www.uta.edu/infosys/e_comm/terms/term_a.htm*

* *American Standard Code for Information Interchange (ASCII): A widely used and internationally recognised coding system to represent characters in a standard way. ASCII is commonly used for storage within computer systems, and for exchange between them.*

** *Browser: The generic term for software programs that retrieve, display, and print information on World Wide Web. The most popular browsers are Microsoft Internet Explorer, Netscape Navigator and Mosaic. Mosaic was the first browser to introduce graphics. Previously, users were only allowed to view the text of web pages.*

*** *Secure Socket Layer (SSL): SSL was designed by Netscape for use in electronic commerce for transactions involving confidential information such as credit card numbers. Secure Socket Layer uses a system of public and private key authentication combined with other schemes to verify electronic signatures. The ability to conduct secure and confidential transactions over the internet is critical to the success of electronic commerce. Public key is the password that the sender uses to encrypt the data and the private key is used by the receiver of a message to decrypt the data.*

been sold. B2C commerce, therefore, entails a wide gamut of marketing activities such as identifying activities, promotion and sometimes even delivery of products (e.g., music or films) that are carried out online. e-commerce permits conduct of these activities at a much lower cost but high speed. For example, ATM speeds up withdrawal of money.

ATM speeds up withdrawal of Money

e-commerce greatly facilitates and speeds up the entire B2C process. Withdrawal of one's own money from banks was, for example, a tedious process in the past. One had to go through a series of procedural formalities before he or she was able to get the payment. After the introduction of ATMs, all that is fast becoming history now. The first thing that occurs is that the customer is able to withdraw his money, and the rest of the back-end processes take place later.

Customers these days are becoming very choosy and desire individual attention to be given to them. Not only do they require the product features be tailor-made to suit their requirements, but also the convenience of delivery and payment at their pleasure. With the onset of e-commerce, all this has become a reality.

Further, B2C variant of e-commerce enables a business to be in touch with its customers on round-the-clock basis. Companies can conduct online surveys to ascertain as to who is buying what and what the customer satisfaction level is.

By now, you might have formed the opinion that B2C is a one-way traffic, i.e., from business-to-customers. But do remember that its corollary, C2B commerce is very much a reality which provides the consumers with the freedom of shopping-at-will. Customers can also make use of call centres set up by companies to make toll free calls to make queries and lodge complaints round the clock at no extra cost to them. The beauty of the process is that one need not set up these call centres or help lines; they may be outsourced. We shall discuss this aspect later in the section devoted to Business Process Outsourcing (BPO).

(iii) Intra-B Commerce: Here, parties involved in the electronic transactions are from within a given business firm, hence, the name intra-B commerce. As noted earlier too, one critical difference between e-commerce and e-business is that, e-commerce comprises a business firm's interaction with its suppliers, and distributors/other business firms (hence, the name B2B) and customers (B2C) over the internet. While e-business is a much wider term and also includes the use of intranet for managing interactions and dealings among various departments and persons within a firm. It is largely due to use of intra-B commerce that today it has become possible for the firms to go in for flexible manufacturing. Use of computer networks makes it possible for the marketing department to interact

constantly with the production department and get the customised products made as per the requirements of the individual customer. In a similar vein, closer computer-based interactions among the other departments makes it possible for the firm to reap advantages of efficient inventory and cash management, greater utilisation of plant and machinery, effective handling of customers' orders, and effective human resource management.

Just as intercom facilitated voice communication within the office, intranet facilitates multimedia and even 3-D graphic communication among organisational units for well-informed decisions, permitting better coordination, faster decisions and speedier workflows. Take for example, a firm's interactions with its employees, sometimes referred to as B2E commerce. Companies are resorting to personnel recruitment, interviewing and selection, training, development and education via e-commerce (captured in a catch-all phrase 'e-learning'). Employees can use electronic catalogues and ordering forms and access inventory information for better interaction with the customers. They can send field reports via e-mail and the management can have them on real time basis. In fact, Virtual Private Network (VPN) technology would mean that employees do not have to come to office. Instead, in a way the office goes to them and they can work from wherever they are, and at their own speed and time convenience. Meetings can be held online via tele/ video conferencing.

(iv) C2C Commerce: Here, the business originates from the consumer and the ultimate destination is also consumers, thus the name C2C commerce. This type of commerce is best suited for dealing in goods for which there is no established market mechanism, for example, selling used books or clothes either on cash or barter basis. The vast space of the internet allows persons to globally search for potential buyers. Additionally, e-commerce technology provides market system security to such transactions which otherwise would have been missing if the buyers and sellers were to interact in anonymity of one-to-one transactions? An excellent example of this is found at eBay where consumers sell their goods and services to other consumers. To make this activity more secure and robust, several technologies have emerged. Firstly, eBay allows all the sellers and buyers to rate one another. In this manner, future prospective purchasers may see that a particular seller has sold to more than 2,000 customers — all of whom rate the seller as excellent. In another example, a prospective purchaser may see a seller who has previously sold only four times and all four rate the seller poorly. This type of information is helpful. Another technology that has emerged to support C2C activities is that of the payment intermediary. PayPal is a good example of this kind.

e-commerce makes flexible Manufacturing and Mass Customisation possible

Customised products have traditionally been made to order by craftsmen and have, therefore, been expensive and delivery times have been long. Industrial revolution meant that organisations could engage in mass production and could sell homogeneous products rolled out of the factory at a lower cost due to the economies of scale. Thanks to e-commerce, now organisations can offer customised products/ services at lower costs, that previously were only associated with mass produced commodity items. Here are a few examples:

401(k) Forum (US)	Customises educational content and investment advice based on individual interviews.
Acumin Corp. (US)	Customises vitamin pills specified by using the Internet. Customers fill in lifestyle and health questionnaire.
Dell (US)	Build your own PC.
Green Mountain Energy Resources (US)	Electricity supplier (but not generator). Customers could select sources for their electricity, e.g., hydro, solar, etc.
Levi Jeans (Original Spin) (US)	Tailored jeans service. Web service suspended after complaints by retailers but service now offered through retailers. Offers 49,500 different sizes and 30 styles for a total of nearly 1.5 million options for a cost of just $55. Orders are sent by net and jeans are produced and shipped in 2-3 weeks.
N.V. Nutsbedrijf Westland (Newzealand)	Westland supplies natural gas to many tulip growers in the Netherlands. Computers in the greenhouse help greenhouse owners maintain temperature, CO2 output, humidity, light and other factors in the most cost-efficient manner.
National Bicycle (Japan)	Custom built bicycles within 2/3 days of taking the order.
Simon and Schuster (US)	Teachers can order customised books specifically matched to individual course and student needs. Xerox DocuTech printers are generating in excess of 125,000 customised books a month.
Skyway (US)	Skyway is a logistics company offering whole order delivery. Shipments from multiple origins with different modes of transport can be merged in transit and delivered as a single order with one set of paperwork to the store or consumer.
SmithKline Beecham (US)	Creates customised stop smoking programme for customers. Uses call centre questionnaire to generate a series of personalised communications.

Source: *Adapted from http://www.managingchange.com*

Facilitating C2C Commerce — The Way eBay Does it

Trust and Safety

eBay's **Trust and Safety** team is responsible for keeping the marketplace a safe, well-lit place for people around the world to trade with one other.

Actively working to enable members to trade safely, eBay fosters trust between members through the development and enforcement of rules and policies, the creation of reputation-building programs, and the prevention of fraud.

eBay also works behind-the-scenes to prevent fraud and, in the event a problem occurs, eBay proactively works with law enforcement and government agencies throughout the world to enforce its policies. Rooted in the values of the marketplace, eBay's policies are aimed at offering a level playing field, encouraging open, honest, and accountable transactions, and creating economic opportunities for everyone.

To help the community trade safely and build trust with one another, eBay offers the following tools, programs, and resources:

eBay Feedback
eBay feedback is each user's reputation on eBay. Through positive, negative, and neutral ratings and comments, each eBay member has a Feedback score. All sellers display this score in the Seller Information box of the item listing page. eBay Feedback fosters trust between people by acting as both an incentive to do the right thing and as a mark of distinction for those who conduct transactions with respect, honesty, and fairness.

Buyer Protection
Users who see the PayPal Buyer Protection shield buy with confidence knowing that their purchase is covered up to $500 at no additional cost. For users who are not using PayPal as their payment system, there is also the eBay Standard Purchase Protection Program which provides up to $200 coverage (minus a $25 processing cost) for either items that are not received or items that are not as described in the listing.

Spoof (Fraudulent) Web Site Protection
The eBay Toolbar with Account Guard enables eBay members to protect their accounts by indicating when they are on an eBay or PayPal site and warning them when they are on a potentially fraudulent, or spoof, Web site. In addition, eBay helps users prevent and combat fraud by conducting online tutorials on spoof email and educating members on how to report issues to spoof@ebay.com.

eBay Security Center
The eBay Security Center provides guidance on buying safely, selling safely, and paying safely, as well as valuable third-party, government and law-enforcement resources. The Security Center is a valuable resource for all users, from first-time buyers who want information on safeguarding online transactions to high-volume sellers who want to protect their copyrights.

Source: *ww w.ebay.com*

Instead of purchasing items directly from an unknown, untrusted seller; the buyer can instead send the money to Pay Pal. From there, PayPal notifies the seller that they will hold the money for them until the goods have been shipped and accepted by the buyer.

An important C2C area of interactive commerce can be the formation of consumers' forum and pressure groups. You might have heard of Yahoo groups. Like a vehicle owner in a traffic jam can alert others via message on radio (you must have heard traffic alerts on FM) about the traffic situation of the area he is stuck in; an aggrieved customer can share his experience with a product/service/ vendor and warn others by writing just a message and making it known to the entire group. And, it is quite possible that the group pressure might result in a solution of this problem.

From the foregoing discussion concerning scope of e-business, it is clear that e-business applications are varied and many.

e-Business versus Traditional Business

By now, you must have formed an idea as to how e-enabling has radically transformed the mode of doing business. Table 5.1 provides a feature on comparison between traditional business and e-business.

A comparative assessment of the features of traditional and e-business as listed in Table 5.1 points towards the distinct benefits and limitations of e-business that we shall discuss in the following paragraphs.

5.3 Benefits of e-Business

(i) Ease of formation and lower investment requirements: Unlike a host of procedural requirements for setting up an industry, e-business is relatively easy to start. The benefits of internet technology accrue to big or small business alike. In fact, internet is responsible for the popularity of the phrase: *'networked individuals and firms are more efficient than networthed individuals.'* This means that even if you do not have much of the investment (networth) but have contacts (network), you can do fabulous business.

Imagine a restaurant that does not have any requirement of a physical space. Yes, you may have an online 'menu' representing the best of cuisines from the best of restaurants the world-over that you have networked with. The customer visits your website, decides the menu, places the order that in turn is routed to the restaurant located closest to his location. The food is delivered and the payment collected by the restaurant staff and the amount due to you as a client solicitor is credited to your account through an electronic clearing system.

(ii) Convenience: Internet offers the convenience of '24 hours × 7 days a week × 365 days' a year business that allowed Rita and Rekha to go for shopping well after midnight. Such flexibility is available even to the organisational personnel whereby they can do work from wherever they are, and whenever they may want to do it.

Box A
Some e-Business Applications

e-Procurement: It involves internet-based sales transactions between business firms, including both, "reverse auctions" that facilitate online trade between a single business purchaser and many sellers, and, digital marketplaces that facilitate online trading between multiple buyers and sellers.

e-Bidding/e-Auction: Most shopping sites have 'Quote your price' whereby you can bid for the goods and services (such as airline tickets!). It also includes e-tendering whereby one may submit tender quotations online.

e-Communication/e-Promotion: Right from e-mail, it includes publication of online catalogues displaying images of goods, advertisement through banners, pop-ups, opinion poles and customer surveys, etc. Meetings and conferences may be held by the means of video conferencing.

e-Delivery: It includes electronic delivery of computer software, photographs, videos, books (e-books) and journals (e-journals) and other multimedia content to the user's computer. It also includes rendering of legal, accounting, medical, and other consulting services electronically. In fact, internet provides the firms with the opportunities for outsourcing of a host of Information Technology Enabled Services (ITES) that we will be discussing under business process outsourcing. Now, you can even print the airlines and railway tickets at home!

e-Trading: It involves securities trading, that is online buying and selling of shares and other financial instruments. For example, sharekhan.com is India's largest online trading firm.

Yes, e-business is truly a business as enabled and enhanced by electronics and offers the advantage of accessing anything, anywhere, anytime.

(iii) Speed: As already noted, much of the buying or selling involves exchange of information that internet allows at the click of a mouse. This benefit becomes all the more attractive in the case of information-intensive products such as softwares, movies, music, e-books and journals that can even be delivered online. Cycle time, i.e., the time taken to complete a cycle from the origin of demand to its fulfilment, is substantially reduced due to transformation of the business processes from being sequential to becoming parallel or simultaneous. You know that in the digital era, money is defined as electronic pulses at the speed of light, thanks to the electronic funds transfer technology of e-commerce.

(iv) Global reach/access: Internet is truly without boundaries. On the one hand, it allows the seller an access to the global market; on the other hand, it affords to the buyer a freedom to choose products from almost any part of the world. It would not be an exaggeration to say that in the absence of internet, globalisation would have been considerably restricted in scope and speed.

Table 5.1 Difference between Traditional and e-Business

Basis of distinction	Traditional business	e-business
Ease of formation	Difficult	Simple
Physical presence	Required	Not required
Locational requirements	Proximity to the source of raw materials or the market for the products	None
Cost of setting up	High	Low as no requirement of physical facilities
Operating cost	High due to fixed charges associated with investment in procurement and storage, production, marketing and distribution facilities	Low as a result of reliance on network of relationships rather than ownership of resources
Nature of contact with the suppliers and the customers	Indirect through intermediaries	Direct
Nature of internal communication	Hierarchical - from top level management to middle level management to lower level management to operatives	Non-hierarchical, allowing direct vertical, horizontal and diagonal communication
Response time for meeting customers'/internal requirements	Long	Instantaneous
Shape of the organisational structure	Vertical/tall, due to hierarchy or chain of command	Horizontal/flat due to directness of command and communication.
Business processes and length of the cycle	Sequential precedence-succession relationship, i.e., purchase - production/operation - marketing - sales. The, business process cycle is, therefore, longer	Simultaneous (concurrence) different processes. Business process cycle is, therefore, shorter
Opportunity for inter-personal touch	Much more	Less
Opportunity for physical pre-sampling of the products	Much more	Less. However, for digitable products such an opportunity is tremendous. You can pre-sample music, books, journals, software, videos, etc.
Ease of going global	Less	Much, as cyber space is truly without boundaries

Government patronage	Shrinking	Much, as IT sector is among the topmost priorities of the government
Nature of human capital	Semi-skilled and even unskilled manpower needed.	Technically and professionally qualified personnel needed
Transaction risk	Low due to arm's length transactions and face-to-face contact.	High due to the distance and anonymity of the parties

(v) Movement towards a paperless society: Use of internet has considerably reduced dependence on paperwork and the attendant 'red tape.' You know that Maruti Udyog does bulk of its sourcing of supplies of materials and components in a paper less fashion. Even the government departments and regulatory authorities are increasingly moving in this direction whereby they allow electronic filing of returns and reports. In fact, e-commerce tools are effecting the administrative reforms aimed at speeding up the process of granting permissions, approvals and licences. In this respect, the provisions of Information Technology Act 2000 are quite noteworthy.

5.4 Limitations of e-Business

e-business is not all that rosy. Doing business in the electronic mode suffers from certain limitations. It is advisable to be aware of these limitations as well.

(i) Low personal touch: High-tech it may be, e-business, however, lacks warmth of interpersonal interactions. To this extent, it is relatively less suitable mode of business in respect of product categories requiring high personal touch such as garments, toiletries, etc.

(ii) Incongruence between order taking/giving and order fulfilment speed: Information can flow at the click of a mouse, but the physical delivery of the product takes time. This incongruence may play on the patience of the customers. At times, due to technical reasons, web sites take unusually long time to open. This may further frustrate the user.

(iii) Need for technology capability and competence of parties to e-business: Apart from the traditional 3R's (**R**eading, W**R**iting, and A**R**ithmetic), e-business requires a fairly high degree of familiarity of the parties with the world of computers. And, this requirement is responsible for what is known as digital divide, that is the division of society on the basis of familiarity and non-familiarity with digital technology.

(iv) Increased risk due to anonymity and non-traceability of parties: Internet transactions occur between cyber personalities. As such, it becomes difficult to establish the identity of the parties. Moreover, one does not know

Information Technology Act 2000 paves way for Paperless Society

Below are given some of the provisions of Information Technology Act 2000 that have made it possible to have paper less dealings in the business world as well as in the government domain.

Legal recognition of electronic records (Section 4): Where any law provides that information or any other matter shall be in writing or in the typewritten or printed form, then, notwithstanding anything contained in such law, such requirement shall be deemed to have been satisfied if such information or matter is rendered or made available in an electronic form; and accessible so as to be usable for a subsequent reference.

Legal recognition of digital signatures (Section 5): Where any law provides that information or any other matter shall be authenticated by affixing the signature or any document shall be signed or bear the signature of any person, hence notwithstanding anything contained in such law, such requirement shall be deemed to have been satisfied, if such information or matter is authenticated by means of digital signature affixed in such a manner as may be prescribed by the Central Government.

Use of electronic records and digital signatures in Government and its agencies (Section 6-1): Where any law provides for the filing of any form, application or any other document with any office, authority, body or agency owned or controlled by the appropriate Government in a particular manner; the issue or grant of any licence, permit, sanction or approval by whatever name called in a particular manner; the receipt or payment of money in a particular manner, then, notwithstanding anything contained in any other law for the time being in force, such requirement shall be deemed to have been satisfied if such filing, issue, grant, receipt or payment, as the case may be, is effected by means of such electronic form as may be prescribed by the appropriate Government.

Retention of electronic records (Section 7-1): Where any law provides that documents, records or information shall be retained for any specific period, then, that requirement shall be deemed to have been satisfied if such documents, records or information are retained in the electronic form.

Source: *Information Technology Act, 2000*

even the location from where the parties may be operating. It is riskier, therefore, transacting through internet. e-business is riskier also in the sense that there are additional hazards of impersonation (someone else may transact in your name) and leakage of confidential information such as credit card details. Then, there also are problems of 'virus,' and 'hacking,' that you must have heard of. If not, we will be dealing with security and safety concerns of online business.

(v) People resistance: The process of adjustment to new technology and new way of doing things causes stress and

Digital Divide: The Facts

First the figures. The statistics on the basic building block of connectivity — that is the phone lines — are stark.

According to the latest *UN Human Development Report*, industrialised countries, with only 15 per cent of the world's population, are home to 88 per cent of all Internet users. Less than 1 per cent of people in South Asia are online even though it is home to one-fifth of the world's population.

The situation is even worse in Africa. With 739 million people, there are only 14 million phone lines. That's fewer than in Manhattan or Tokyo. Eighty percent of those lines are in only six countries. There are only 1 million Internet users on the entire continent compared with 10.5 million in the UK.

Even if telecommunication systems were in place, most of the world's poor would still be excluded from the information revolution because of illiteracy and a lack of basic computer skills. In Benin, for example, more than 60 per cent of the population is illiterate. The other 40 per cent are similarly out of luck. Four-fifths of the Websites are in English, a language understood by only one in 10 people on the planet.

Source: *http://www.news.bbc.co.uk/.../special_report/1999/10/*

a sense of insecurity. As a result, people may resist an organisation's plans of entry into e-business.

(vi) Ethical fallouts: "So, you are planning to quit, you may as well quit right now", said the HR manager showing her a copy of the e-mail that she had written to her friend. Sabeena was both shocked and stunned as to how her boss got through to her e-mail account. Nowadays, companies use an 'electronic eye' to keep track of the computer files you use, your e-mail account, the websites you visit etc. Is it ethical?

Despite limitations, e-commerce is the way

It may be pointed out that most of the limitations of e-business discussed above are in the process of being overcome. Websites are becoming more and more interactive to overcome the problem of 'low touch.' Communication technology is continually evolving to increase the speed and quality of communication through internet. Efforts are on to overcome the digital divide, for example, by resorting to such strategies as setting up of community telecentres in villages and rural areas in India with the involvement of government agencies, NGOs and international institutions. In order to diffuse e-commerce in all nooks and corners, India has undertaken about 150 such projects.

In view of the above discussion, it is clear that e-business is here to stay and is poised to reshape the businesses, governance and the economies. It is, therefore, appropriate that we familiarise ourselves with how e-business is conducted.

5.5 Online Transactions

Operationally, one may visualise three stages involved in online transactions. Firstly, the pre-purchase/sale stage including advertising and information-seeking; secondly, the purchase/sale stage comprised of steps such as price negotiation, closing of purchase/sales deal and payment; and thirdly, the delivery stage (see Figure 5.2). It may be observed from Figure 5.2 that, except the stage relating to delivery, all other stages involve flow of information. The information is exchanged in the traditional business mode too, but at severe time and cost constraints. In face-to-face interaction in traditional business mode, for example, one needs to travel to be able to talk to the other party, requiring travel effort, greater time and costs. Exchange of information through the telephone is also cumbersome. It requires simultaneous presence of both the parties for verbal exchange of information. Information can be transmitted by post too, but this again is quite a time consuming and expensive process. Internet comes in as the fourth channel which is free from most of the problems referred to above. In the case of information-intensive products and services such as software and music, even delivery can take place online.

What is described here is the process of online trading from a customer's standpoint. We will be discussing the seller's perspective in the paragraphs on resource-requirements for e-business. So, are you ready with the shopping list or would you like to rely on your instincts as you take a tour of the shopping mall? Let us follow Rita and Rekha browsing indiatimes.com (Exhibit 5.1).

(i) Registration: Before online shopping, one has to register with the online vendor by filling-up a registration form. Registration means that you have an 'account' with the online vendor. Among various details that need to be filled in is a 'password' as the sections relating to your 'account', and 'shopping cart' are password protected. Otherwise, anyone can login using your name and shop in your name. This can put you in trouble.

(ii) Placing an order: You can pick and drop the items in the shopping cart. Shopping cart is an online record of what you have picked up while browsing the online store. Just as in a physical store you can put in and take items out of your cart, likewise, you can do so even while shopping online. After being sure of what you want to buy, you can 'checkout' and choose your payment options.

(iii) Payment mechanism: It is clear from Exhibit 5.1 that payment for the purchases through online shopping may be done in a number of ways:

- **Cash-on Delivery (CoD):** As is clear from the name, payment for the goods ordered online may be made in cash at the time of physical delivery of goods.
- **Cheque:** Alternatively, the online vendor may arrange for the pickup of the cheque from the customer's end. Upon realisation, the delivery of goods may be made.

Table 5.2 Telecenters Project in India

Name	Number of kiosks	Agency	Activity
Bhoomi	30	Government of Karnataka	Land title
e-chaupal	3500	ITC	Procurement
Warna	72	National Informatics Centre (NIC)	Cane Factory
Akshaya	617	Kerala	e-literacy
Tara Haat information	18	Development Alternatives	e-training, market
Drishtee	90	Digital Partners	Mandi prices, land titles
Milk Coops	5000	National Dairy Development Board	Milk Collection
CIC (NE)	30	NIC	Internet Access

Source: *IIM, Workshop on Scaling up ICT for Poverty Alleviation in India, Ahmedabad, February 26-27, 2004.*

- **Net-banking Transfer:** Modern banks provide to their customers the facility of electronic transfer of funds over the net. In this case, therefore, the buyer may transfer the amount for the agreed price of the transaction to the account of the online vendor who may, then, proceed to arrange for the delivery of goods.
- **Credit or Debit Cards:** Popularly referred to as 'plastic money,' these cards are the most widely used medium for online transactions. In fact, about 95 per cent of online consumer transactions are executed with a credit card. Credit card allows its holder to make purchase on credit. The amount due from the card holder to the online seller is assumed by the card issuing bank, who later transfers the amount involved in the transaction to the credit of the seller. Buyer's account is debited, who often enjoys the freedom to deposit the amount in instalments and at his convenience. Debit card allows its holder to make purchases through it to the extent of the amount lying in the corresponding account. The moment any transaction is made, the amount due as payment is deducted electronically from the card.

To accept credit card as an online payment type, the seller first needs a secure means of collecting credit card information from its customer. Payments through credit cards can be processed either manually, or through an online authorisation system, such as SSL Certificate (see box on, History of e-commerce).

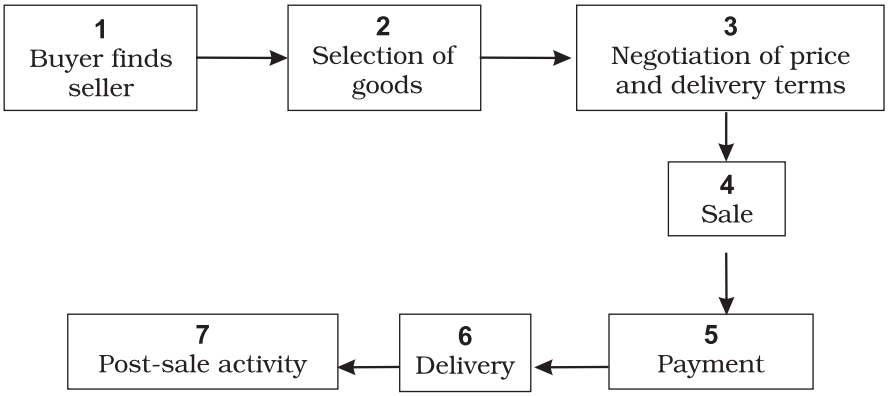


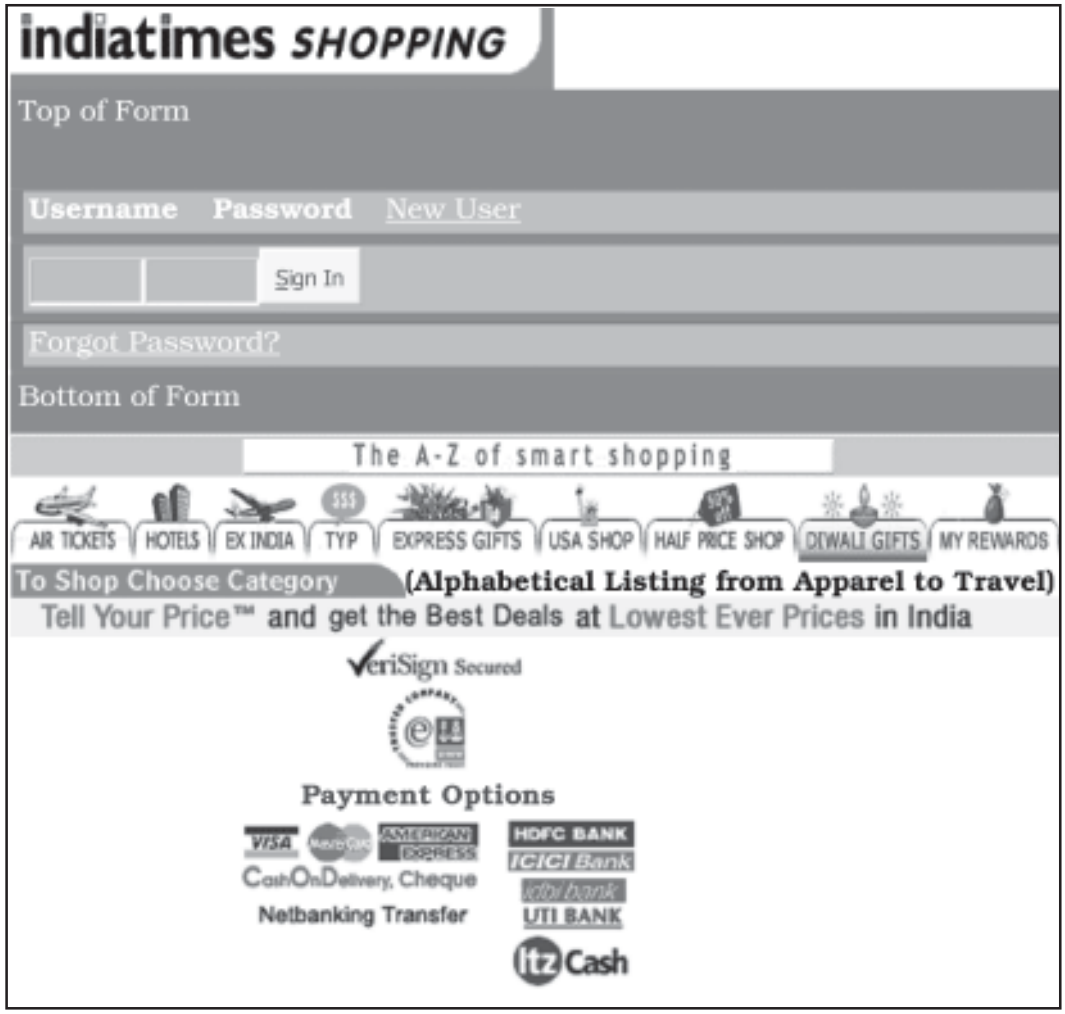
Figure 5.2 Buying / Selling Process

- **Digital Cash:** This is a form of electronic currency that exists only in cyberspace. This type of currency has no real physical properties, but offers the ability to use real currency in an electronic format. First you need to pay to a bank (vide cheque, draft, etc.) an amount equivalent to the digital cash that you want to get issued in your favour. Then the bank dealing in e-cash will send you a special software (you can download on your hard disk) that will allow you to draw digital cash from your account with the bank. You may then use the digital funds to make purchases over the web. This type of payment system hopes to resolve the security problems related to the use of credit card numbers on the internet.

5.6 Security and Safety of e-Transactions: e-Business Risks

Online transactions, unlike arm's length transactions in physical exchange, are prone to a number of risks. Risk refers to the probability of any mishappening that can result into financial, reputational or psychological losses to the parties involved in a transaction. Because of greater probability of such risks in the case of online transactions, security and safety issues becomes the most crucial concern in e-business. One may broadly discuss these issues under three headings: transaction risks, data storage and transmission risks, and threat to intellectual property and privacy risks.

Exhibit 5.1 An Adaptation of 'Shopping' Page of indiatimes.com — India's Biggest Shopping Mall



Source: *adapted from indiatimes.com*

Notes: 1. *Typing of URL address in the address window of the browser leads one to the addressee's home page, in this case indiatimes.com. From there one can move on to 'Shopping.' Home page means the introductory or menu page of a website. A home page usually contains the site's name and a directory of its contents. All other pages on a server are usually accessible by following links from the home page.* ***2.*** *URL, i.e., 'Uniform Resource Locator' refers to a world wide web address that specifies a specific site, page, graphic, or document on the internet. It is www.indiatimes.com in the present case.*

(i) Transaction risks: Online transactions are vulnerable to the following types of transaction risks:

- Seller denies that the customer ever placed the order or the customer denies that he ever placed the order. This may be referred to as '*default on order taking/giving.*'
- The intended delivery does not take place, goods are delivered at wrong address, or goods other than ordered may be delivered. This may be regarded as '*default on delivery*'.
- Seller does not get the payment for the goods supplied whereas the customer claims that the payment was made. This may be referred to as '*default on payment*'.

Thus, in e-business risk may arise for the seller or the buyer on account of default on order taking/giving, delivery as well as payment. Such situations can be averted by providing for identity and location/address verification at the time of registration, and obtaining authorisation as to the order confirmation and payment realisation. For example, in order to confirm that the customer has correctly entered his details in the registration form, the seller may verify the same from the 'cookies'. Cookies are very similar to the caller ID in telephones that provide telemarketers with such relevant information as: the consumer's name, address and previous purchase payment record. As for customer's protection from anonymous sellers, it is always advisable to shop from well-established shopping sites. While allowing advertisers to sell their products online, these sites assure customers of the sellers' identities, locations and service records. Sites such as eBay even provide for rating of the sellers. These sites provide protection to the customers against default on delivery and reimburse the payments made up to some extent.

As for the payments, we have already seen that in almost 95 per cent of the cases people use credit cards for their online purchases. At the time of confirming the order, the buyer is required to furnish the details such as the card number, card issuer and card validity online. These details may be processed offline; and only after satisfying himself or herself about the availability of the credit limits, etc., the seller may go ahead with the delivery of goods. Alternatively, e-commerce technology today permits even online processing of the credit card information. For protecting the credit card details from being misused, shopping malls these days use the encryption technology such as Netscape's Secure Sockets Layer (SSL). You can gain some information about SSL from box on history of e-commerce. In the succeeding section, we will familiarise you with the encryption or cryptography — an important tool used for safeguarding against data transmission risks in online transactions.

(ii) Data storage and transmission risks: Information is power indeed. But think for a moment if the power goes

into the wrong hands. Data stored in the systems and en-route is exposed to a number of risks. Vital information may be stolen or modified to pursue some selfish motives or simply for fun/ adventure. You must have heard of 'virus' and 'hacking'. Do you know the full form of the acronym 'VIRUS?' It means **V**ital **I**nformation **U**nder **S**iege. Actually, virus is a program (a series of commands) which replicates itself on the other computer systems. The effect of computer viruses can range from mere annoyance in terms of some on-screen display (Level-1 virus), disruption of functioning (Level-2 virus) damage to target data files (Level-3 virus), to complete destruction of the system (Level-4 virus). Installing and timely updating anti-virus programmes and scanning the files and disks with them provides protection to your data files, folders and systems from virus attacks.

Data may be intercepted in the course of transmission. For this, one may use *cryptography*. It refers to the art of protecting information by transforming it (encrypting it) into an unreadable format called 'cyphertext'. Only those who possess a secret key can decipher (or decrypt) the message into 'plaintext'. This is similar to using 'code words' with some one so that others do not understand your conversation.

(iii) Risks of threat to intellectual property and privacy: Internet is an open space. Once the information is available over the internet, it moves out of the private domain. It then becomes difficult to protect it from being copied. Data furnished in the course of online transactions may be supplied to others who may start dumping a host of advertising and promotional literature into your e-mail box. You are then at the receiving end, with little respite from receiving junk mails.

5.7 Resources Required for Successful e-business Implementation

Setting up of any business requires money, men and machines (hardware). For e-business, you require additional resources for developing, operating, maintaining and enhancing a website where 'site' means location and 'web' means world wide web (www). Simply speaking, a website is a firm's location on the world wide web. Obviously, website is not a physical location. Rather, it is an online embodiment of all the content that a firm may like to provide to others.

5.8 Outsourcing: Concept

Outsourcing is yet another trend that is radically reshaping business. It refers to a long-term contracting out generally the non-core and of late even some of the core activities to captive or third party specialists with a view to benefitting from their experience, expertise, efficiency and, even investment.

This simple definition leads one to the salient features of the concept that are not peculiar to an industry/ business or country, but have become a global phenomenon.

(i) Outsourcing involves contracting out: Literally, outsourcing means to source from outside what you have hitherto been doing in-house. For example, most companies have so far appointed their own sanitation staff for maintaining neatness, cleanliness and overall housekeeping of their premises. That is, sanitation and housekeeping functions were being performed in-house. But of late, many companies have started outsourcing these activities, i.e., they have entrusted outside agencies to perform these activities for their organisations on a contractual basis.

(ii) Generally non-core business activities are outsourced: Sanitation and housekeeping functions are non-core for most organisations. Of course, for municipalities and sanitations services providers, these activities comprise the core of their business activity. Housekeeping is a core activity for a hotel. In other words, depending upon what business a company is in, there will be some activities that are central and critical to its basic business purpose. Other activities may be regarded as secondary or incidental to fulfilling that basic purpose. The purpose of a school, for example, is to develop a child by means of curricular and co-curricular activities. Clearly, these activities comprise the 'core' activities. Running a cafeteria/canteen or a book store is non-core activity for a school.

As the organisations venture to experiment with outsourcing, they may initially outsource only the non-core activities. But later on, as they become comfortable with managing interdependencies, they may start getting even the core activities performed by the outsiders. For example, a school may tie-up with some computer training institute to impart computer education to its students.

(iii) Processes may be outsourced to a captive unit or a third party: Think of a large multinational corporation that deals in diverse products and markets them to a large number of countries. A number of processes such as recruitment, selection, training, record and payroll (Human Resources), management of accounts receivable and accounts payable (accounting and finance), customer support/grievance

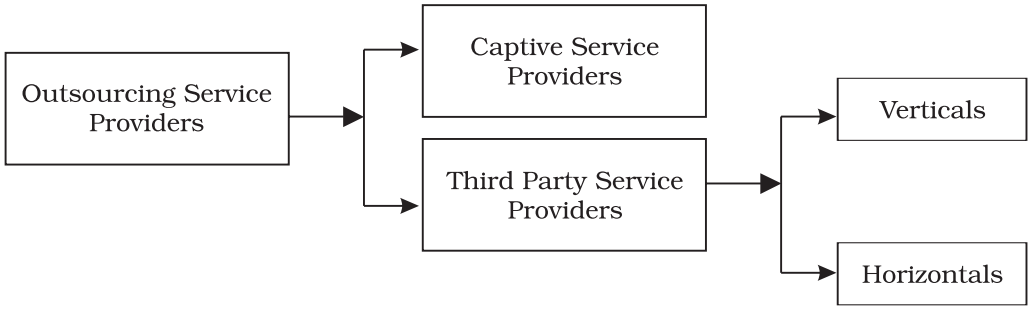


Figure 5.3 Types of Outsourcing Service Providers

handling /troubleshooting (marketing) are common to all its subsidiaries operating in different countries. If these processes could be centralised and parcelled out to a business unit created especially for this purpose, this would result in avoidance of duplication of resources, realisation of efficiency and economy's performance of same activity on a large scale at one or a few select locations, thereby resulting in substantial reduction in costs. Clearly, therefore, if the task of performing some activity internally is sufficiently large, it may be beneficial for the firm to have a captive service provider, i.e., a service provider set up for providing services of a given kind to only one firm. General Electric (GE) is, for instance, the largest captive BPO unit in India for providing certain kinds of services to the parent company in the United States as well as to its subsidiaries in other countries. Or else, these processes may be parcelled out to third party service providers who operate independently in the market and provide services to other firms too.

Figure 5.3 provides a synoptical view of how a firm can outsource some of its activities to the captive and third party service providers. The hired party service providers are the persons/firms which specialise in some processes such as Human Resource Management (HRM) and provide their services to a wide base of clients, cutting across industries. Such service providers are called 'horizontals' in the outsourcing terminology. Else, they may specialise in one or two industries and scale up to doing a number of processes from non-core to core. These are called 'verticals.' As the service providers mature, they move simultaneously horizontal and vertical.

The most important reason underlying the use of outsourcing is to benefit from the expertise and experience of others. Institutions like schools, companies and hospitals can outsource the cafeteria activity to the catering and nutrition firms for whom these activities comprise the core or heart of their operations. The idea of outsourcing is valuable as you tend to gain not only in terms of their expertise and experience and the resultant efficiency, but it also allows you to limit your investment and focus attention to what your core processes are.

Little wonder that outsourcing is fast becoming an emerging mode of business. Firms have started increasingly outsourcing one or more of their processes which can be more efficiently and effectively carried out by others. What qualifies outsourcing as an emerging mode of business is its increasing acceptance as a fundamental business policy and philosophy, as opposed to the earlier philosophy of 'doing it all by yourself '.

5.8.1 Scope of Outsourcing

Outsourcing comprises four key segments: contract manufacturing, contract research, contract sales and informatics (see Figure 5.4).

The term outsourcing has more popularly come to be associated with IT-enabled services or Business Process Outsourcing (BPO). In fact,

even more popular term is 'call centres' providing customer-oriented voice based services. About 70 per cent of the BPO industry's revenue comes from call-centers, 20 per cent from high-volume, low-value data work and the remaining 10 per cent from higher-value information work. 'Customer Care' accounts for the bulk of the call center activities with 24 hrs 7 days handling of in-bound (customer queries and grievances) and out-bound (customer surveys, payment follow-up and telemarketing) traffic. Figure 5.5 outlines various types of outsourcing activities.

5.8.2 Need for Outsourcing

Necessity, they say, is the mother of all inventions. This can be said to be true even in case of the idea of outsourcing. As discussed in the introduction to the chapter, global competitive pressures for higher quality products at lower costs, ever demanding customers, and emerging technologies are the three major drivers causing a rethink or re-look at business processes. These may be regarded as factors responsible for the continuing emergence of outsourcing as a mode of business. In fact, today outsourcing is being resorted to not out of compulsion, but also out of choice. Some of the major reasons (and also benefits) of outsourcing are discussed below.

(i) Focusing of attention: You may be good at doing so many things in academics and extra-curricular activities, yet you would be better off by focusing your limited time and money on just a few things for better efficiency and effectiveness. Likewise, business firms are realising the usefulness of focusing on just a few areas where they

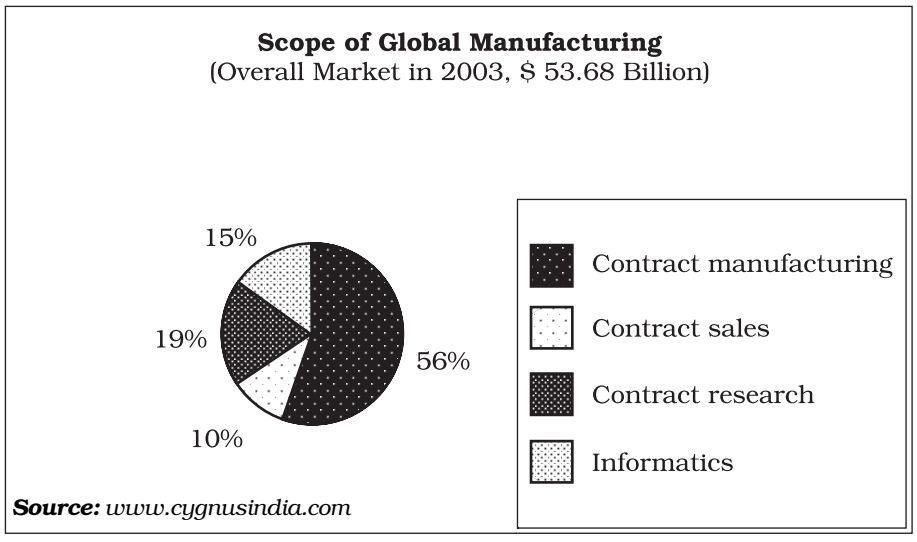


Figure 5.4 Scope of Outsourcing

have distinct capability or core competence, and contracting out the rest of the activities to their outsourcing partners. You are aware, that, in order to create utilities or value, a business engages in a number of processes, viz., purchase and production, marketing and sales, R&D, accounting and finance, HR and administration etc. Firms need to define or redefine themselves. They, for example, need to consider as to whether they would like to be called a manufacturing or marketing organisation. Such a way of delimiting the scope of business enables them to focus their attention and resources on select activities for better efficiency and effectiveness.

(ii) Quest for excellence: You are aware of the benefits of division of labour

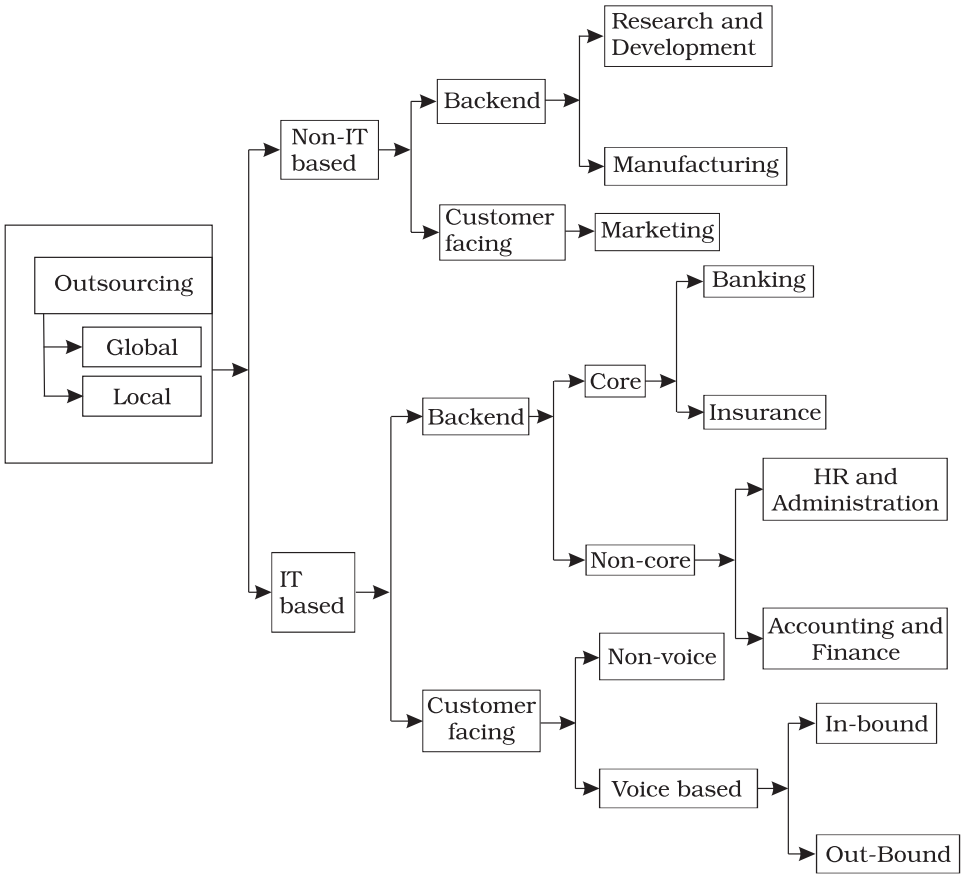


Figure 5.5 Anatomy of Outsourcing

and specialisation. Outsourcing enables the firms to pursue excellence in two ways. One, they excel themselves in the activities that they can do the best by virtue of limited focus. And, they excel by extending their capabilities through contracting out the remaining activities to those who excel in performing them. In the quest for excellence, it is necessary not only to know what you would like to focus on, but also what you would like others to do for you.

(iii) Cost reduction: Global competitiveness necessitates not only global quality, but also global competitive pricing. As the prices turn southwards due to competitive pressures, the only way to survival and profitability is cost reduction. Division of labour and specialisation, besides improving quality, reduces cost too. This happens due to the economies of large scale accruing to the outsourcing partners as they deliver the same service to a number of organisations. Differences in prices of factors of production across the countries are also a factor contributing to cost reduction. For example, India is a preferred destination for global outsourcing of Research and Development, manufacturing, software development and IT enabled services (ITES) because of large scale availability of required manpower at lower costs.

(iv) Growth through alliance: To the extent you can avail of the services of others, your investment requirements are reduced, others have invested in those activities for you. Even if you may like to have a stake in the business of your outsourcing partners, you profit from not only the low-cost and better quality services provided by them to you but also by virtue of a share in the profit from the overall business they do. Therefore, you can expand rapidly as the same amount of investible funds result in creation of a large number of businesses. Apart from financial returns, outsourcing facilitates inter-organisational knowledge sharing and collaborative learning. This may also explain the reasons why the firms today are outsourcing not only their routine, non-core processes, but also seeking to benefit from outsourcing such strategic and core processes as Research and Development.

(v) Fillip to economic development: Outsourcing, more so offshore outsourcing, stimulates entrepreneurship, employment and exports in the host countries (i.e., the countries from where outsourcing is done). In India in the IT sector alone, for example, there has been such a tremendous growth of entrepreneurship, employment and exports that today we are the undisputed leaders as far as global outsourcing in software development and IT-enabled services are concerned. Presently, we have 60 per cent of the $150 billion (1 billion = Rs. 100 crores) global outsourcing share in the informatics sector.

5.8.3 Concerns over Outsourcing

It will not be out of place to be aware of some of the concerns that outsourcing is besieged with.

(i) Confidentiality: Outsourcing depends on sharing a lot of vital

information and knowledge. If the outsourcing partner does not preserve the confidentiality, and, say, for example, passes it on to competitors, it can harm the interest of the party that outsources its processes. If outsourcing involves complete processes/products, there is a further risk of the outsourcing partner starting up a competitive business.

(ii) Sweat-shopping: As the firms that outsource seek to lower their costs, they try to get maximum benefit from the low-cost manpower of the host countries. Moreover, it is observed that whether in the manufacturing sector or the IT-sector, what is outsourced is the kind of components or work that does not much build the competency and capability of the outsourcing partner beyond the skills needed to comply with a rigidly prescribed procedure/ method. So, what the firm that go in for outsourcing look for is the 'doing' skills rather than development of the 'thinking' skills.

(iii) Ethical concerns: Think of a shoe company that, in order to cut costs, outsources manufacturing to a developing country where they use child labour/women in the factories. Back home, the company cannot do so due to stringent laws forbidding use of child labour. Is cost cutting by using child labour in countries where it is not outlawed or where the laws are 'weak', ethical? Similarly, is it ethical to outsource the work to countries where there exists wage-discrimination on the basis of sex of the worker?

(iv) Resentment in the home countries: In the course of contracting out manufacturing, marketing, Research and Development or IT-based services, what is ultimately contracted out is 'employment' or jobs. This may cause resentment back in the home country (i.e., the country from which the job is being sourced out) particularly if the home country is suffering from the problem of unemployment.

The aforementioned concerns, however, do not seem to matter much as the global outsourcing continues to flourish. As India emerges as a global outsourcing hub, the industry is forecast to explode at exponential rates — from 23,000 people and $ 10 million per annum in 1998 to over a million people and revenues in excess of $ 20 billion by 2008.

Key Terms

e-Business	e-Commerce	Browser
Virus	Secure Sockets Layer (SSL)	Online trading
e-Trading	e-Procurement	e-Bidding
e-Cash	Business Process Outsourcing	Call Centres
Verticals	Horizontals	Captive BPO units
Sweat-shopping		

SUMMARY

The world of business is changing. e-business and outsourcing are the two most obvious expressions of this change. The trigger for the change owes its origin to both internal and external forces. Internally, it is the business firm's own quest for improvement and efficiency that has propelled it into e-business and outsourcing. Externally, the ever mounting competitive pressures and ever demanding customers have been the force behind the change.

Electronic mode of doing business, or e-business as it is referred to, presents the firm with promising opportunities for anything, anywhere and anytime to its customers, thereby, dismantling the time and space/locational constraints on its performance. Though e-business is high-tech, it suffers from the limitation of being low in personal touch. The customers as a result do not get attended to on an interpersonal basis. Besides, there are concerns over security of e-transactions and privacy of those who transact business over the internet. The benefits of e-commerce also seem to have accrued unevenly across countries and across regions within a country.

Apart from becoming digital, the firms are also resorting to a departure from the erstwhile 'do it all by yourself' mindset. They are increasingly contracting out manufacturing, R and D as well as of business processes irrespective of whether these are IT enabled or not. India is riding high on the global outsourcing business and has gained considerably in terms of employment generation, capability building and contribution to exports and GDP.

Together, the two trends of e-business and outsourcing are reshaping the way business is and will be conducted. Interestingly, both e-business and outsourcing are continuing to evolve, and that is why these are referred to as the emerging modes of business.

EXERCISES

Multiple Choice Questions

Tick mark (✓) the most appropriate answer to the following questions

1. e-commerce does not include
   a. A business's interactions with its suppliers
   b. A business's interactions with its customers
   c. Interactions among the various departments within the business
   d. Interactions among the geographically dispersed units of the business

2. Outsourcing
   a. Restricts only to the contracting out of Information Technology Enabled Services (ITES)
   b. Restricts only to the contracting out of non-core business processes
   c. Includes contracting out of manufacturing and R&D as well as service processes — both core and non-core — but restricts only to domestic territory
   d. Includes off-shoring
3. The payment mechanism typical to e-business
   a. Cash on Delivery (CoD)
   b. Cheques
   c. Credit and Debit Cards
   d. e-Cash
4. A Call Centre handles
   a. Only in-bound voice based business
   b. Only out-bound voice based business
   c. Both voice based and non-voice based business
   d. Both customer facing and back-end business
5. It is not an application of e-business
   a. Online bidding
   b. Online procurement
   c. Online trading
   d. Contract R&D

Short Answer Questions (50 Words)

1. State any three differences between e-business and traditional business.
2. How does outsourcing represent a new mode of business?
3. Describe briefly any two applications of e-business.
4. What are the ethical concerns involved in outsourcing?
5. Describe briefly the data storage and transmission risks in e-business.

Long Answer Questions

1. Why are e-business and outsourcing referred to as the emerging modes of business? Discuss the factors responsible for the growing importance of these trends.
2. Elaborate the steps involved in on-line trading.
3. Evaluate the need for outsourcing and discuss its limitations.

4. Discuss the salient aspects of B2C commerce.
5. Discuss the limitations of electronic mode of doing business. Are these limitations severe enough to restrict its scope? Give reasons for your answer.

Projects/Assignments

1. Compare and contrast the products and their prices available on the internet and in retail shops. Is the quality, customer satisfaction and other factors the same?
2. Study any business unit/company which is using e-commerce, e-business as a way of doing business. Interview some people working there and find out the advantages in practical business in terms of its costs also.