

MJMC II SEM

IT AND COMPUTER APPLICATION IN MASS MEDIA

Information Technology:

Information technology (IT) is the use of computers to store, retrieve, transmit, and manipulate data or information. IT is typically used within the context of business operations as opposed to personal or entertainment technologies. IT is considered to be a subset of information and communications technology (ICT). An information technology system (IT system) is generally an information system, a communications system or, more specifically speaking, a computer system – including all hardware, software and peripheral equipment – operated by a limited group of users.

Humans have been storing, retrieving, manipulating, and communicating information since the Sumerians in Mesopotamia developed writing in about 3000 BC, but the term information technology in its modern sense first appeared in a 1958 article published in the Harvard Business Review; authors Harold J. Leavitt and Thomas L. Whisler commented that "the new technology does not yet have a single established name. We shall call it information technology (IT)." Their definition consists of three categories: techniques for processing, the application of statistical and mathematical methods to decision-making, and the simulation of higher-order thinking through computer programs.

The term is commonly used as a synonym for computers and computer networks, but it also encompasses other information distribution technologies such as television and telephones. Several products or services within an economy are associated with information technology, including computer hardware, software, electronics, semiconductors, internet, telecom equipment, and e-commerce.

Characteristics of high quality information

The information must have the following characteristics:

- **Availability/accessibility**

Information should be easy to obtain or access. Information kept in a book of some kind is only available and easy to access if you have the book to hand. A good example of availability is a telephone directory, as every home has one for its local area. It is probably the first place you look for a local number. But nobody keeps the whole country's telephone books so for numbers further afield you probably phone a directory enquiry number. For business premises, say for a hotel in your city, you would probably use the Internet.

Businesses used to keep customer details on a card-index system at the customer's branch. If the customer visited a different branch a telephone call would be needed to check details. Now, with centralised computer systems, businesses like banks and building societies can access any customer's data from any branch.

- **Accuracy**

Information needs to be accurate enough for the use to which it is going to be put. To obtain information that is 100% accurate is usually unrealistic as it is likely to be too expensive to produce on time. The degree of accuracy depends upon the circumstances.

Accuracy is important. As an example, if government statistics based on the last census wrongly show an increase in births within an area, plans may be made to build schools and construction companies may invest in new housing developments. In these cases any investment may not be recouped.

- **Reliability or objectivity**

Reliability deals with the truth of information or the objectivity with which it is presented. You can only really use information confidently if you are sure of its reliability and objectivity.

When researching for an essay in any subject, we might make straight for the library to find a suitable book. We are reasonably confident that the information found in a book, especially one that the library has purchased, is reliable and (in the case of factual information) objective. The book has been written and the author's name is usually printed for all to see. The publisher should have employed an editor and an expert in the field to edit the book and question any factual doubts they may have. In short, much time and energy goes into publishing a book and for that reason we can be reasonably confident that the information is reliable and objective.

Compare that to finding information on the Internet where anybody can write unedited and unverified material and 'publish' it on the web. Unless you know who the author is, or a reputable university or government agency backs up the research, then you cannot be sure that the information is reliable. Some Internet websites are like vanity publishing, where anyone can write a book and pay certain (vanity) publishers to publish it.

- **Relevance/appropriateness**

Information should be relevant to the purpose for which it is required. It must be suitable. What is relevant for one manager may not be relevant for another. The user will become frustrated if information contains data irrelevant to the task in hand.

For example, a market research company may give information on users' perceptions of the quality of a product. This is not relevant for the manager who wants to know opinions on relative prices of the product and its rivals. The information gained would not be relevant to the purpose.

- **Completeness**

Information should contain all the details required by the user. Otherwise, it may not be useful as the basis for making a decision. For example, if an organisation is supplied with information regarding the costs of supplying a fleet of cars for the sales force, and servicing and maintenance costs are not included, then a costing based on the information supplied will be considerably underestimated.

Ideally all the information needed for a particular decision should be available. However, this rarely happens; good information is often incomplete. To meet all the needs of the situation, you often have to collect it from a variety of sources.

- **Level of detail/conciseness**

Information should be in a form that is short enough to allow for its examination and use. There should be no extraneous information. For example, it is very common practice to summarise financial data and present this information, both in the form of figures and by using a chart or graph. We would say that the graph is more concise than the tables of figures as there is little or no extraneous information in the graph or chart. Clearly there is a trade-off between level of detail and conciseness.

- **Presentation**

The presentation of information is important to the user. Information can be more easily assimilated if it is aesthetically pleasing. For example, a marketing report that includes graphs of statistics will be more concise as well as more aesthetically pleasing to the users within the organisation. Many organisations use presentation software and show summary information via a data projector. These presentations have usually been well thought out to be visually attractive and to convey the correct amount of detail.

- **Timing**

Information must be on time for the purpose for which it is required. Information received too late will be irrelevant. For example, if you receive a brochure from a theatre and notice there was a concert by your favourite band yesterday, then the information is too late to be of use.

- **Value of information**

The relative importance of information for decision-making can increase or decrease its value to an organisation. For example, an organisation requires information on a competitor's performance that is critical to their own decision on whether to invest in new machinery for their factory. The value of this information would be high. Always keep in mind that information should be available on time, within cost constraints and be legally obtained.

- **Cost of information**

Information should be available within set cost levels that may vary dependent on situation. If costs are too high to obtain information an organisation may decide to seek slightly less comprehensive information elsewhere. For example, an organisation wants to commission a market survey on a new product. The survey

could cost more than the forecast initial profit from the product. In that situation, the organisation would probably decide that a less costly source of information

MODEM

A modem – a portmanteau of "modulator-demodulator" – is a hardware device that converts data into a format suitable for a transmission medium so that it can be transmitted from one computer to another (historically along telephone wires). A modem modulates one or more carrier wave signals to encode digital information for transmission and demodulates signals to decode the transmitted information. The goal is to produce a signal that can be transmitted easily and decoded reliably to reproduce the original digital data. Modems can be used with almost any means of transmitting analog signals from light-emitting diodes to radio. A common type of modem is one that turns the digital data of a computer into modulated electrical signal for transmission over telephone lines and demodulated by another modem at the receiver side to recover the digital data.

Modems are generally classified by the maximum amount of data they can send in a given unit of time, usually expressed in bits per second (symbol bit/s, sometimes abbreviated "bps") or rarely in bytes per second (symbol B/s). Modems can also be classified by their symbol rate, measured in baud. The baud unit denotes symbols per second, or the number of times per second the modem sends a new signal. For example, the ITU V.21 standard used audio frequency-shift keying with two possible frequencies, corresponding to two distinct symbols (or one bit per symbol), to carry 300 bits per second using 300 baud. By contrast, the original ITU V.22 standard, which could transmit and receive four distinct symbols (two bits per symbol), transmitted 1,200 bits by sending 600 symbols per second (600 baud) using phase-shift keying.

Modulation:

At the very first it receives data from the computer in digital format, then modem converts it to analog format to send it out over the telephone line, this process is called modulation.

Demodulation:

At data goes to the other receiving end in an analog format the modem converts it to digital format in order to computer system understanding, this process is called demodulation.

Types of Modem In Computer Network:

A modem can be installed internally or externally it up to you what kind of device you needed. Different types of this famous are as follow.

External Modem:

The external modem is such kind of modem that is connected out of the computer through a serial cable. It requires easy steps and external power supply as well. It is expensive but it provides fast data transmission speed that is why it is used in small to big offices to maintain internet connection without any sort of hurdle.

Internal Modem:

The internal modem is very similar to an electronic circuit board. It is mounted over the motherboard into on expansion slot. It is little hard to make complete setup. It provides slow data speed that is why it is used mostly in the personal computer at home and small shops.

Wireless Modem in PC:

The wireless modem is the very popular device. It is being used personal computers to the offices level. It transmits digital signal through the air without using cable. In this purpose radio frequency is used that is why it provides very good internet speed. Smartphone and other devices like notebook, desktop computers use this modem to establish internet connection without using wire. So that cellular companies are providing this sort of connection to make internet connection accessible for all.

ISDN Modem:

ISDN stands for (Integrated Services Digital Network), it is completely digital modem. Synchronous or asynchronous data transmission is used to make it faster and reliable. ISDN can be installed in expansion card on the motherboard or connected externally through a wire just like an external modem. It requires particular telephone line as a digital telephone line.

This type of device can communicate only other ISDN modem but provides high speed of data transmission.

DSL Modem:

DSL stands for “Digital Subscriber Line”. It allows transmission over the normal telephone lines. The advantage of this modem is that provides faster data transmission than ISDN.

Types of DSL modem

There are two types of DSL that are as follows:

ADSL Modem:

ADSL stands for “Asymmetric Digital Subscriber Line”; it provides faster downloading speed than the uploading. Generally, up to 640 kbps uploading and 8.1 Mbps downloading. It became popular because of its downloading speed.

SDSL Modem:

SDSL stands for “Symmetric Digital Subscriber”, it is very similar to the ADSL but it provides same data transmission speed in both directions (uploading, downloading). Generally, 3 Mbps for both directions (uploading, downloading).

Normally, DSL is used under the three miles of “Public Switched Telephone Network” as distance increases the speed of data decreases.

Cable Modem:

The cable modem is a broadband device. Television cable network is used instead of telephone line. Simply T.V network cable is connected to a personal computer system via USB port to establish the internet connection. The benefit is that it provides faster internet connection speed than DSL or ISDN. That is why in this period of time it is much reliable.

Satellite Modem:

It is expensive technology. No need to wires or any of telephone connection. In this device, satellite technology is used to send or receive data. It knows the high-speed internet connection. This satellite technology is used excessively for down streaming. Comparatively, it is little slower than DSL or cable modem.

Advantages of Modem:

Under are given few advantages of this famous device:

- It makes to connect each other to many devices like mobile phones, notepad, laptops etc.
- It is playing the basic role to make this world as a global village.
- Internet marketing runs through this device just like connecting each other.
- In these days so many countries have doing the slogan as “digital India”. It is because of the modem communication technology.
- It made our life easier as we solve problems of each other.
- It provides the best security system for agencies and many others departments.
- Now days there are many built in modems in different devices that became easier to configure it.
- In many places the networking system is completely dependent on modems.
- Inventions of Wi-Fi modems are also very suitable for people as more than 10 people can use only one modem to connect the world.

Types of Networks

There are several different types of computer networks. Computer networks can be characterized by their size as well as their purpose.

The size of a network can be expressed by the geographic area they occupy and the number of computers that are part of the network. Networks can cover anything from a handful of devices within a single room to millions of devices spread across the entire globe.

Some of the different networks based on size are:

Personal area network or PAN

Local area network or LAN

Metropolitan area network or MAN

Wide area network, or WAN

In terms of purpose, many networks can be considered general purpose, which means they are used for everything from sending files to a printer to accessing the Internet. Some types of networks, however, serve a very particular purpose. Some of the different networks based on their main purpose are:

Storage area network, or SAN

Enterprise private network, or EPN

Virtual private network, or VPN

Let's look at each of these in a bit more detail.

Personal Area Network

A personal area network, or PAN, is a computer network organized around an individual person within a single building. This could be inside a small office or residence. A typical PAN would include one or more computers, telephones, peripheral devices, video game consoles and other personal entertainment devices.

If multiple individuals use the same network within a residence, the network is sometimes referred to as a home area network, or HAN. In a very typical setup, a residence will have a single wired Internet connection connected to a modem. This modem then provides both wired and wireless connections for multiple devices. The network is typically managed from a single computer but can be accessed from any device. This type of network provides great flexibility. For example, it allows you to:

Send a document to the printer in the office upstairs while you are sitting on the couch with your laptop.

Upload a photo from your cell phone to your desktop computer.

Watch movies from an online streaming service to your TV.

If this sounds familiar to you, you likely have a PAN in your house without having called it by its name.

Local Area Network

A local area network, or LAN, consists of a computer network at a single site, typically an individual office building. A LAN is very useful for sharing resources, such as data storage and printers. LANs can be built with relatively inexpensive hardware, such as hubs, network adapters and Ethernet cables.

The smallest LAN may only use two computers, while larger LANs can accommodate thousands of computers. A LAN typically relies mostly on wired connections for increased speed and security, but wireless connections can also be part of a LAN. High speed and relatively low cost are the defining characteristics of LANs.

LANs are typically used for single sites where people need to share resources among themselves but not with the rest of the outside world. Think of an office building where everybody should be able to access files on a central server or be able to print a document to one or more central printers. Those tasks should be easy for everybody working in the same office, but you would not want somebody just walking outside to be able to send a document to the printer from their cell

phone! If a local area network, or LAN, is entirely wireless, it is referred to as a wireless local area network, or WLAN.

Metropolitan Area Network

A metropolitan area network, or MAN, consists of a computer network across an entire city, college campus or small region. A MAN is larger than a LAN, which is typically limited to a single building or site. Depending on the configuration, this type of network can cover an area from several miles to tens of miles. A MAN is often used to connect several LANs together to form a bigger network. When this type of network is specifically designed for a college campus, it is sometimes referred to as a campus area network, or CAN.

Wide Area Network

A wide area network, or WAN, occupies a very large area, such as an entire country or the entire world. A WAN can contain multiple smaller networks, such as LANs or MANs. The Internet is the best-known example of a public WAN.

The Role of Information Technology in Media Industry

INTERNET JOURNALISM NEWS ON INTERNET

For years, publishers of newspapers, magazine and other print products have been fascinated with the idea of delivering information electronically. In contrast to conventional printing on paper, delivery by computer and other means seemed to offer several benefits both the producer and consumer. Second, information be disseminated to readers much more quickly than it could in printed publication. The bulk of information in a daily newspaper is at least 12 hour old; articles in a monthly magazine are often written three or four months before they are published. During the next decade, publications turned to several other means of delivering

information electronically. Some hooked up with online services such as CompuServe and America Online. Other experimented with fax editions and computer bulletin boards. A range of media companies tried their hands at producing CD-ROMs, delivering information by satellite and e-mail, N11 services (using three-digit phone number like 911) and a number of other methods.

EVOLUTION OF INTERNET JOURNALISM

1995: the Year the web Exploded in 1995, electronic delivery came to age. At of 1993, 20 newspapers worldwide - and a few magazines and newsletters – were published electronically, mostly on online services such as prodigy and CompuServe. During 1994, the number of online newspaper reached to thousands. At this relationship between the journalist and the technical means of gathering and reporting information emerges, we see a new breed of communicator, the techno journalist. In reporting, working and thinking, the journalist of the future will be different from those of today. The journalist of the future will have to balance the humanistic sensitivity that produces best journalism with newfound technological tools, journalists must not settle for becoming mere scientists' apprentices; they will have look at the impact of technology on values.

In the future, the mass-media journalist may be the exception rather than the rule. The journalist will have to gain a deeper, more diverse understanding of communication, largely because of the way information will be stored-in databases.

WEB-OFFSET

Photo setting was made possible by the computer but it owed its utilization to the web-offset printing process. The continuance of hot metal typesetting and page make – up had been unchallenged because it suited the plate making process used in letterpress printing. The plates could be cast conveniently in metal from the

moulds taken from the made up pages. The plate makers shared the same hot metal and foundry facilities as the line casters which were located usually on the same floor moreover metal plates in heavy relief had always been regarded as the only way type could be transferred successfully to newsprint by means of the high speed rotary presses used to print modern newspapers. Thus newspapers that the new plates were considerably lighter than the 18 kg conventional stereotype metal plate. A disadvantage was that, while the durability and cheap running of the rotary presses had been married to the cost-saving of cold type technology, plate-making time had been considerably increased and edition schedules upset by the extra procedures needed to convert pasted-up pages into metal printing plates. This was alleviated when the development of tougher polymer in the early 1980s, enabled traditional rotary presses to be used for direct printing from polymer plates derived from pasted-up pages.

DE-CENTRALIZED PRINTING

Page facsimile transmission is a technique whereby made-up pages can be photographed and transmitted from the main production centre to satellite printing plants within the circulation area so that the printing operation can be carried out simultaneously at several centers. The page photographs digitized by means of scanners so that the data is compatible for sending by microwave, for short distances, or by broadband telephone lines or earth satellite for longer distances. The signal is encoded by a special receiver at the other plant and is made into a page transparency. This is fed into a plate-maker which produces a polymer printing plate identical to the one being used in the main centre. The average transmission time is about three and a half minutes. This makes it an attractive proposition in countries, especially in the Third World, in which the use of satellite printing centers can be the answer to communication and distribution problems. In

Britain, to help in efficient distribution, a number of provincial and national newspapers, including The Guardian, Daily Mirror, Daily Star, the Sun and News of the World, are using page facsimile transmission for all or part of their production outside London, while The Financial Times and the Wall Street Journal circulate internationally on the same day by this means. Even Pravda uses the technique to reach the confines of the USSR. The use of computerized systems has meant the dawn of the *electronic newsroom*, with news editors checking reporters' files on the screen, sending back stories where coverage is not sufficient or has failed in some way, and routing stories to the copy-taster and the subeditors as they become ready.

TASTING METHODS

The effect on news copy-tasting of electronic copy inputs is more apparent than real. Whether on screen or on hard copy the basic routine of the job is the same. Important stories are drawn to the attention of the night editor or chief subeditor; the clearly dead ones are spiked, the doubtful but possible ones put into a separate pile to be turned over in moments of need, the likely topics of pages put aside for use as page planning proceeds. Some national papers refine the tasting process by filtering copy through a rough and a fine copy-taster, or through separate home and foreign tasters. The aim is not only a fail-safe reading operation but a continuously creative assessment of the copy flow to pin-point things that might otherwise be missed.

ELECTRONIC COPY-TASTING

Electronic copy-tasting, in which the taster reads from the screen, is necessary once direct input of copy is adopted – when reporters and correspondents type their stories directly on to a VDU instead of a typewriter, or when their telephoned copy is likewise entered into the computer by the telephone copy-takers. Once such copy

has been cleared by the newsroom it can be recalled from its queue in the computer for tasting and, after that, for page planning and editing. Electronic copy-tasting is made easier not only by the taster being able to call up stories at a stroke, but by being able to call up the complete directory of stories held in a given queue (i.e. newsroom, agency, sport, etc.) which gives the source, name and catch-line and the first few lines of each story, and also its length. The different stages which computerized technology has reached in the various production centers has resulted in news agencies – the principal suppliers of news copy in any country – having to maintain a variety of services to satisfy all their subscribers.

ELECTRONIC EDITING

With direct input of copy into the computer the subeditor the advantage of electronic aids in editing. As with copy tasting, the ease of operation is greatest where everything comes through the computer, rather than with come subbing still having to be done on hard copy.

Subeditors who have become familiar with screen editing do not usually like to go back to subbing hard copy. Stories can be checked for length by relating the word count and number of line given in the screen header to the space allocated on the page layout. Fact and word pruning are then carried out as with hard copy subediting. The difference is that the use of the cursor, or electronic pen, on screen enables deletions and alterations to be make faster than by ball pen, while at the same time resulting in instantly clean copy without the scribbles, scorings and connecting lines that characterize hard copy subbing. After each change or alteration the text automatically rearranges itself on the screen. Split screen, on which two stories are displayed side by side, can be used when working on copy from another source. Deleted material may be also left in the computer in note form from which it can be reactivated and brought back into the text, if needed, by a simple command stroke. With electronic editing, copy is capable of almost

endless reworking and revising as it is with any word processor-while at the same time finishing up clean and ready for typesetting. Moreover, after a story has been checked and cut to fit it can be scrolled back for re-reading on the screen and any late alterations made with greater ease than would be the case with already heavily subbed hard copy. Modern systems have facility for delivering print-out proofs after the H & J stage showing the story as it will look when typeset. These are useful if the story needs to be taken away-for telephone checking, stay. In fact, many newspaper offices make little use of the facility once direct input has transferred the whole editing operation into the computer. Nor is the print-out proof needed to increase the distribution of a story within the editorial department since it is now possible to generate ‘carbon’ copies of a story within the system.

ELECTRONIC MAIL

Electronic mail (E-mail) is a system for sending messages or files to the accounts of other computer users. The sender and recipient may be on the same or a different computer. Electronic mail works very much like regular postal mail. Every user on the net work has a private mailbox. Once received, your mail is kept for you until you decide to discard it. Like regular postal mail, you must know a user’s address to send messages. If the mail system cannot deliver your message, it will make every attempt to return it to you, but is possible for misaddressed messages to get lost somewhere along the way.

NEWS PAPER AND TELEVISION NEWSROOM

□ Newsroom computers chapter the keystrokes of reporters and editors, eliminating the need for keyboarding that took place in the —good old days! when reporters wrote on manual typewriters. Without computers, newspapers would have to hire people to fill all those positions eliminated in the computer revolution.

□ Computers make it possible for reporters to cover stories that were simply impossible to write in simpler times. It would take several reporters several lifetimes to do the data analysis to done on computers.

All electronic editing systems are built around computers. Newspapers quite commonly use a computer to handle ad billings, subscription lists and payrolls as well as news stories. Larger papers are more likely to have separate computer for the news operation. You can think of the computer as a big file. Before you can get something out, something has to go in. input is handled in a variety of ways. Here are the four main ways:

1. Direct keyboarding-you type on a VDT hooked up to the computer.
2. Scanner copy-reporters type scanner copy and run it through the *optical character recognition* (OCR) machine. This machine reads copy electronically and puts it directly into the computer.
3. Computer-to-computer hookups-the wire services send material to your computer at great speed; you hear nothing, but you get notes on what is in the system.
4. Paper tape-human operators called tape punchers read your typewritten copy and from it make a perforated tape that can be used to set type directly or to feed a story into the computer. Because it requires extra work, including a second keyboarding of the story, this system is being sup planted by other methods.

NEWSPAPER LAYOUT

The electronics people have flushed us out of this final fortress of pencil-and-paper editing. The rout is not complete, but old-style layout work is in its last decade. Pagination, the electronic are term for page layout on a video display terminal, has gone beyond the dreaming stage and crept into newsrooms. The equipment is expensive, it is imperfect and it is best suited to tabloid-size newspapers, but

publications are buying it. Pagination, when used with other electronic editing and printing equipment, offers a number of advantages. You can arrange a page as you want it—you see body type, headlines, cut lines, boxes and blanks for photographs. When you press the go button, the page zips through the computer and comes out full size, ready to be photographed in the plate-making process. The day is coming, shortly, when your page-size VDT will be connected directly to the press, and any change on the VDT image will result in an immediate change on the printed page.

NEWSPAPERS ADAPT TO COPE WITH THE NEW MEDIA

For decades the entertainment-information business has been dominated by newspapers, television and radio in an environment of relative media stability.

Now the host of electronically based, untested, computer-oriented information systems we call the new media threatens to change the basic structure of the communications industry. And that change is already taking place. Whether from fear of competition or hunger for profits, established media are increasingly hedging their communication bets and involving themselves one or more new media enterprises.

REACTIONS TO CHANGING NATURE OF JOURNALISM

New media are accompanied by many new and challenging ideas about how to gather, store, process and deliver information, and, at the same time that they are branching out into the new fields, newspapers are using these newly learned concepts to restructure internal operations as well. Indeed, corporate impact on communications businesses. Journalism, after all, is a tradition-steeped business. Journalists tend to see their calling in strict terms of truth and falsehood, unchanged by war or riot, by invention or economics. But journalism, as a profession and as a set of standards, has never been independent of the tools used

to communicate a given message. The changes required by the new media and the evolving communications environment are no exception, and it is evident that they will come. Whether their impact is felt mostly in the 1980s is irrelevant because they must be anticipated and confronted now.

GROUP COLLABORATION

As the networks mature, it is increasingly obvious that they are not merely a vehicle for conveying endless amounts of information to the desktop, but can provide an effective platform for working with colleagues, irrespective of location. The use of the www for collaboration is currently the focus of much interest and development and many interesting new tools are appearing which make online collaborative projects a realistic, if not attractive, option for distributed workgroups. You can use the internet for discussions, working on documents, and a range of other tasks.

HOLDING MEETINGS

Meetings with other network users using facilities such as videoconferencing are no longer a futuristic dream, especially for users on high-speed connection in the academic and research communities. And for quality communication, there is nothing quite like interactive dialogue with a person you can see and hear, even considering the benefits and convenience of tools like email. Meetings using network videoconferencing and audio conferencing enable network users to have the immediacy of face-to-face meeting. This includes the experience of real personalities, with the potential benefits of seeing spontaneous reactions sorting out problems on the spot, getting instant feedback on ideas, not to mention saving on travel costs.

VIDEO CONFERRNCING

Videoconferencing and audio conferencing are powerful facilities when they work well, but not all network users have a benefit of the high-speed connection required. They may instead need to look at systems for the interactive exchange of plain-text messages such as chat. Chat is also commonly included in collaboration software. It may not be as glamorous as phone and videoconferencing tools, but it does have the advantage of people on low-speed connection.

DISCUSSION FORUMS

Collaborating with others usually means ongoing discussions which add and flow depending on what's happening in the workgroup. Internet discussion forums provide an ideal vehicle for this type of activity. Messages can be posted to the discussion is usually available, enabling the group to refer back to previous messages. The software to access such forums is generally easily accessed, installed, and used. The net excels in providing such facilities for group discussion. Mailing lists and Usenet News have a well established role .There are many web conferencing systems to choose from too. With these, a web browser is used to read text messages in a forum and to add messages to the forum. Conferencing systems are organized by subject with individual conferences devoted to a particular subject. The discussion might then be further divided by discussions on particular topics, referred to as threads.

EXCHANGE FILES

The networking provides a superb transport medium for sending files to other people. They offer fast and efficient transmission over any distance, a choice of system catering for different circumstances, and a range of application software to facilitate the transmission or distribution of files.