

Electronic Communications

Network Services

Electronic mail (e-mail)

Electronic mail allows documents to be sent electronically from one computer to another. With e-mail sent via a service provider (e.g. CompuServe), the sender sends the document to the recipient's e-mail address, a small area on the service providers computer, and not directly to the recipient. The recipient is informed that they have been sent the e-mail when they log onto their computer.

The Internet has made e-mail facilities available to anyone with a modem and is connected to the Internet by a service provider.

Most networks have e-mail facilities, whether they are LANs, based on a single site, or WANs, which can be based on many sites.

There are a number of reasons why people prefer to use e-mail rather than the postal service. E-mail is much faster and you don't have to spend time and money on printing the mail out and getting envelopes and stamps. It is also more environmentally friendly since less paper is used and less fuel is consumed when transporting the mail.

Conferencing

One example of this is video conferencing, enabling people to hold a conference without having to leave their desk. Each person requires a PC, video compression card, sound card, video camera and specialist software. Using this equipment a number of people can both see and speak to each other from various locations.

The advantages of this type of conferencing include reduced travel and accommodation costs and the ability to instantly send documents to each person during the conference.

Bulletin Boards

A bulletin board service (BBS) is an electronic noticeboard provided by a computer permanently connected to a telephone line so users can log into it via their computers to place notices or access information. Bulletin Boards are used to sell services and goods over the Internet. An Internet chat service can also be classed as a BBS. A BBS is more commonly described as a forum on the Internet. Many of these forums contain specialist information and are set up by enthusiasts.

File Transfer

File transfer is used to transmit files by a process that bunches the data into packages making it faster than electronic mail when sending large files. The receiving system checks for any errors introduced during transmission and a message is sent back to confirm the package is OK.

Interacting with Databases

A network allows users to access the same database and so when a user modifies a database other users will have access to the modifications. Electronic data interchange (EDI) is a network service, which allows companies to exchange data. The system performs ordering, checking and making payments, without any paperwork.

Direct Interaction (voice, data, video)

The introduction of high-speed links and improved processing powers of PCs have made the transfer of multimedia applications which use video, sound, voice, etc possible. Businesses can send video presentations to customers or employees.

Voice messages can be sent via a communication network in which they are transformed into digital form, and can then be stored in the same way as e-mail. When logging onto the system the user is informed that there is voice mail and can then play this message back.

System Components**Data Terminal Equipment**

Data Terminal Equipment is the component at the end of the communication chain acting as a terminal on a computer system or network. The most common is a PC or dumb terminal. However it could be a point-of-sale terminal or cash dispenser.