

What is the Internet?

An often asked question is "What is Internet?"

There have been many attempts to answer this, but they all so far fall short. The scope and vision of the Internet is so expansive and dynamic that it can't be easily expressed in a few words, or pinned down to any definition for any length of time.

The Internet began life 20 years ago as a small US network called Arpanet (Advanced Research Projects Agency-net) which was intended to support military research, in particular into electronic networks - mainframe to mainframe.

As recently as 7 years ago the Internet was a relatively inaccessible tool primarily intended for scientific research, and few people even knew it existed.

With the proliferation of computers in academic, business and even home use in the last 7 years and the growth of isolated networks - came the desire to communicate over greater & greater distances. This led to the evolution of the Internet as we know it in the 90's. Now covering over 60 countries and in excess of 30 million people, the Net is growing at a rate of 10%-15% every month.

Put very simply, the Internet consists of numerous computers from all over the world and on a variety of different platforms (PC, Mac, Unix, Mainframe etc), all communicating with a common set of protocols (language) over conventional telecommunication lines (mostly phone lines). The very existence of the Internet depends on co-operation of the multitude of individual, independent servers that make up the "brains" of the operation, and the (phone) lines that join them all together.

By the very nature of this structure it is impossible for any one person, organisation or country to "own" the Internet. For the same reason, it is also very difficult to police. What is acceptable to one culture, may seem offensive to another, but the only way to prevent access to the Internet, and the information it carries, is to remove all lines of telecommunication.

The Internet has been described as total co-operative anarchy. In theory, it probably shouldn't work - but it does.

Internet today offers the facilities to:

- ◆ Send and receive electronic mail;
- ◆ Source information from a wide variety of sources, from the Financial Markets, Manufacturers & Developers, to researchers out in the field.
- ◆ Read the news, even before it reaches the conventional media;
- ◆ Either read or join and contribute to discussion groups on a diverse range of subjects;
- ◆ Upload and download files;
- ◆ Chat live on-line to other users, anywhere in the world;
- ◆ View pictures, live video and sound;

A small sample of what the Internet has to offer ...

The potential business and recreational uses of the Internet covers a wide swathe of services including:

- ◆ Web Browsing, or "Surfing the Net" - normally using a highly graphical interface - is largely a point-and-shoot, follow your nose exploration. Assisted by various "search engines", or interactive indexes, a user can enter a description of some specific topic, and then choose the links to follow from the results of the search. The links, known as "hyper-text links", can be words or graphics, and are normally highlighted for easy identification. Simply by "clicking" on a link, the user can access information at that "location", which may provide further links to other relevant locations, and so on. Many Web Servers also provide lists of interesting links for those who just want to browse, with no particular purpose in mind.
- ◆ E-mail - electronic mail. Virtually instantaneous mail service to and from the rest of the world.
- ◆ Newsgroups - discussion groups of questions and answers on a wide range of subjects. A question posted to a relevant Newsgroup can elicit a response in a relatively short time, IF someone else reading that Newsgroup knows the answer!
- ◆ FTP - File Transfer Protocol. While Web Browsers can usually be used to download files, FTP agents can allow uploading and downloading (IF you have authorised access).
- ◆ IRC - Internet Relay Chat. Log into an IRC Server and have real-time discussions with people from all over the world on a variety of subjects.

- ◆ There are games, programs, "shopping malls", pick-up joints, trendy hang-outs, museums, book reviews, magazines, press releases, new products and/or services, etc, etc,
- ◆ Special events coverage - Greenpeace reports and coverage of the French tests at Moruroa Atoll; Comet Shoemaker-Levy's assault on Jupiter; the Americas Cup; important conferences and concerts; collaborative educational projects connecting students from all over the world; even the '95 Australian Budget!

While the Net is still an invaluable tool for educators and the scientific community, the business community and society at large have eagerly embraced the concept and the opportunities that come with it.

The Internet of the 90's has come a long way, and it is still evolving. As new developments in technology improve the speed of communications, or expand the facilities available, they will no doubt be incorporated into the Net. As more and more people "migrate" to the net, the on-line facilities will expand to reflect their corporate and individual needs.

By the end of this decade, it is estimated that there will be in excess of 100 million computers connected to the Internet, and billions, if not trillions of dollars worth of business transactions going through the Internet. It will allow people from all over the world to interact on a personal level, obliterating many of the geographical and political barriers along the way.

The possibilities and probabilities are staggering, and we've only just begun.

The "Tyranny of Distance!"

While the metropolitan areas of Australia are currently well covered by Internet facilities, areas outside the capital cities are crying out for a "fair go". Many educational institutions have links back through various universities, but public access to these systems is generally restricted, and in some centres actively discouraged. The STD charges involved in calling a metropolitan Internet Service Provider can cost three to four times as much as the Internet access charges in the 060 area alone.

In response to the demand for local public access, the web is slowly reaching out to establish local Internet access points with local businesses. Gradually, most regions with an existing telephone infrastructure will come on-line with local access, and even the more remote regions of Australia will be able to hook up via one of the many proposed satellite systems forming the "information superhighway in the sky".

So how does the Internet work on an individual users level?

All that is basically required for access to the Internet is a computer, software, modem, phone line and a "Service Provider".

Ideally, the computer should be fast with plenty of memory and disk space available and the modem should be as fast as you can justify/afford. This reduces the time it takes to access the Net and theoretically keeps your access charges to a minimum.

There is a wide range of freeware, shareware and commercial software available.

Internet Service Providers (ISPs) operate Servers on the Web with multiple dial-in lines that provide Internet connectivity. Ideally, your ISP should be geographically as close to you as possible. Some also offer permanent connections designed primarily for large business users. ISPs normally provide some start-up software.

Information is a two way street on the "Superhighway"...

Internet for the business community offers access to a wealth of information on a day-to-day basis, as well as long term benefits:

- ◆ Data Managers - software patches & updates, new and enhanced drivers, new product release information and support direct from the manufacturers;
- ◆ Financial Managers: Stock Exchange; Dow Jones; various financial services;
- ◆ Direct e-mail to and from business contacts, suppliers and customers, potentially replacing fax and international phone calls.
- ◆ Government Pages: Budget Details; Hansard; Senate Committee Reports; etc.
- ◆ On-line newspapers and magazines for eg: SMH; NYTimes; Wall Street Journal;
- ◆ Weather Service - of particular interest to agriculturalists; nurserymen; builders;

There are also significant Marketing Advantages to having a presence on the Web. If a business has any interest in export, a Web "presence" with links to the various Web Search Engines will give the business immediate international exposure. Combine this with an e-mail address for direct response, or a list of international dealers, and you have access to a global market growing at a phenomenal rate.

It is predicted that by the end of the decade, those businesses NOT on the Internet will find themselves seriously disadvantaged.

Costs involved ...

Costs and services vary widely from ISP to ISP.

Albury Local Internet operate on a by-the-minute pro-rata charge rate, and once off joining fee. There are no other charges, annual or monthly, for our service.

We offer all currently available Internet facilities on our Web Server.

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