

The History of the Internet

The **history of the Internet** begins with the development of electronic computers in the 1950s. The internet is not one single invention; it is a simple idea that has evolved throughout the decades into something bigger.

During the Cold War (USA against the Soviet Union) the USA tried to come up with ideas on how to advance communication. One of the ways was to create **ARPA** (Advanced Research Project Agency). While ARPA was launched in the late 1950's, it wasn't till 1962 that the first ideas about a web or interconnected networking system were formed. This gave the Military (and Universities) a way of communicating and data sharing (via dial-up phone lines).

The Internet, then known as **ARPANET**, was brought online in 1969 and connected 4 major Universities (MIT, Harvard, BBN and SDC). By 1971, most major Universities were connected (23 in total). The early Internet was used by computer experts; engineers, scientists, and librarians. There were no personal computers in those days, and anyone who used it, had to learn to use a very complex system.

E-mail was adapted for ARPANET by Ray Tomlinson of BBN in 1972. He picked the @ symbol from the available symbols on his teletype to link the username and address.

The one big disadvantage was that the protocol being used **NCP** (Network Control Protocol) only worked with specific types of computers. So only the same types of computers could communicate with each other. A new protocol was developed, **TCP/IP**, was originally created in 1973 and it was first used to communicate between computers in 1974 – it is still used today.

1977 was a big year for the development of the Internet as we know it today. It's the year the first PC modem, developed by Dennis Hayes and Dale Heatherington, was introduced and initially sold to computer hobbyists.

As the 1970's came to a close, the ARPANET changed drastically. While it started with only a few computers, by 1979 it had around 111 computers linked into the network, however the line speed continued to be the same at 50 kbps.

There were other innovations that improved communications between computers around the country and world. One innovation that is still in use today and proved to make the internet more uniform and facilitate use was the creation of DNS (Domain Name System). While we may actually input a name into our internet browser to visit a site, each name has an IP number (IP stands for internet protocol). So when we enter the name Google.com into our browser, what you don't see is that the computer actually is not searching to connect with Google.com, but the DNS IP address that is 216.239.51.99.

As the mid 1980's came and went, traffic on the internet exploded. From 1985 to the end of 1989, traffic soared from a few thousand computers (hosts), to about 200,000 hosts. Internet speeds started to reach 45 Mbps.

Today internet users do not start up their computers and log onto the ARPANET, we usually open our browsers and start typing www. WWW stands for the **World Wide Web**. The World Wide Web is a platform that makes it easy to access data on the internet. The Web uses pieces of code that links one site to another.

In the early 1990's, the web was more or less a huge depot of information, unfortunately, there was no easy way to organize it, to help the millions of people using the web, to find the information that they were looking for. **Yahoo** was created by two students, one was Jerry Yang, in January of 1994. He created Jerry's Guide to the World Wide Web. However, it wasn't until March of 1995 that Yahoo (Yet Another Hierarchical Official Oracle) was incorporated. While most consider Yahoo, a search engine of sorts where you can find specific items in a web page, it originally started out as a directory of websites.

While Yahoo was the pretty much the first major search engine, a few years later Google became the major search engine and one of the largest companies in the world. Google too started at a university. It originally started as a research project to make searching the web more effective. Google used a better method of search than Yahoo, that bases the relevance or importance of a web page on page ranks rather than meta-tags. The more a web page correlated with topics, the more relevant a page would be and this page would be ranked higher for that specific search term.

Assignment :

Throughout the years, many applications and innovations have significantly changed the way we communicate and do business. Research any 5 of the many things that the internet has changed :

Ex: Email :

History : the first ARPANET network email message was transmitted in 1971.

Impact of Email on Society :

- Email saves trees – There are 144 billion emails sent daily. That's about 1.8 million trees.
- Email is instant – No longer do you have to wait for mail delivery
- Emails can live on a server or in an inbox forever
- Mass email marketing – email has changed the way some companies advertise
- Job loss – email has impacted the way Canada Post now delivers mail