

History of Developments of Computers, Internet and World Wide Web

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The Computing Hardware evolved from the machines that performed separate manual action to perform (1) writing, (2) record keeping and (3) arithmetic operations, to punched card machines, and then to stored – program computers. The development of electronic digital computers started in the late 1930s. The first full scale electronic digital computers built during and shortly after world war II were quite good at arithmetic computation. The first commercial computer machine (Ferranti Mark 1) was delivered in February 1951, and at least nine others were sold between 1951 and 1957. Since then the main frame computers have been miniaturized to the desktop, laptops, tablets and hand held machines. Now, the desktop computers are more than a million times as fast and a billion times as cost effective as the first commercially available electronic computers built in the early 1950s.

The Internet was developed in the early 1960s to enable computers to share information on research and development in scientific and military fields. In late 1962 the theory of packet switching was developed, which formed the basis of Internet connections. Two computers were connected with each another California in 1965 over dial-up telephone lines. It showed the feasibility of wide area networking. The Internet, then

known as ARPANET, in 1969 connected four major computers at universities in USA, and by January 1971 a large number of universities, commercial and military research organizations were connected with each other on network. The internet connectivity became wireless through on land signal transmission and then through satellite. Internet is a very efficient tool of sending and receiving digital data/information from one computer to another, from one part of world to another within seconds.

The World Wide Web (www) or simply “Web” is a global information system, which has provided access to any digital information, anywhere in the world, at any time to any individual. The Web was developed at The **European Organization for Nuclear Research** known as **CERN**, established in 1954 with aim to operate the world’s largest particle physics laboratory based in the northwest suburbs of Geneva, with 20 European member states. The turning point of www was introduction of Web Browser in 1992. In 1993 CERN made use of web browser protocol free of cost which resulted in “Dot – com” boom and bust. The www is functioning as “warehouse of information”, e.g. digital libraries etc, which can be reached via internet from anywhere, by any one at any time.



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