Internet—Open Database of Knowledge

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The ability to store and pass down knowledge was the predisposition for sociocultural and technological evolution of the humankind. Firstly, it made possible for people to systemize, better organize and develop their own thoughts and ideas, put them aside and attend to them later. Secondly, new generations were able to easily assimilate and extend any previously collected piece of knowledge, consequently making overall progress.

Today, although most of the knowledge is stored in countless books, more and more information is being accumulated on all sorts of digital storage devices. One good reason why that is convenient is saving space – many books, probably a whole library, can be stored on a single DVD or a hard disk drive. Also, using a DVD instead of a library presumably saves a smaller forest. But perhaps the greatest benefit is the ability to send digitalized information over computer networks, the Internet being the most important one.

During the last few years, the Internet went through a tremendous development. Prior to 1995, it was used mainly by universities and large companies, but then it found its way to an average person. In just eleven years it got to where it is now – approximately 440 million hosts and 1.09 billion users. There are a few reasons for such rapid growth. First of all, there is the fact that the Internet is free (i.e. not owned by any person or a company) and it does not have any central administration. Also, the Internet protocols (IP, TCP, HTTP, FTP, SMTP, POP3...) are all in the public domain, open in their nature. Hence, the Internet is publically available and accessible, open to everyone.

The most commonly used service on the Internet is the World Wide Web. It is a network made of interconnected documents called web pages, linked together with hyperlinks. Web pages are viewed with a web browser; as a user views them, he follows hyperlinks to navigate from one page to another. Web pages may contain text, images and other multimedial contents, but they may also be interactive, dynamically created or modified depending on the user's action.

As the World Wide Web contains an enormous quantity of web pages, there are search engines which help a user find a page that matches his search criterion – a certain keyword or a phrase. The most popular search engine is Google. It is characterized by a simple interface and the largest number of pages it can find.

The World Wide Web combined with search engines provides a foundation for a large, publically accessible and open database. The vast amount of information it contains can be accessed instantly from all over the world. When compared to traditional libraries, this database is truly amazing.

Built on top of this foundation are many projects which tend to entirely replace traditional libraries. To name a few, there is the Wikipedia, the free encyclopedia. It offers a new concept: readers may add their own articles or edit the existing ones, thus extending and enriching the encyclopedia. Then there is MIT OpenCourseWare, a publication of MIT course materials. It enables people around the world to get an insight into materials used at courses held on MIT. Finally, there is Project Gutenberg, a collection of some 19000 free electronic books, including most of the classical literature.

To conclude, the Internet has surely revolutionized people's ways of sharing knowledge. In the succeeding years, it might completely replace libraries and make knowledge easily accessible to everyone. It would be very interesting to know how this will affect the evolution of the humankind.

References

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