The History of Internet

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Introduction

The internet was firstly used in the 1960s for government researchers to share information. Then, the formation of internet was realized again from the heating up of the Cold War. From that war, it led to the beginning of the internet and then ultimately evolved into the internet that we now know. This research will explain how the internet was created and how it has been developed until now and what it is in nowadays.

The origin of the internet

In the 1960s, the internet started to be use as a way for government researchers to share information to other people. However, in order to use the internet, we need a computer that is capable to move to the site of the computer or contains magnetic computer tapes sent through the conventional postal system which are the obstacles for computers in the past because they were too large and immobile.

The heating up of the Cold War was one of the motivation for people to realize how the internet important is and led to the formation of the internet. During the Cold War, the satellite of the Soviet Union's launch named "Sputnik" was launched in order to share the information which led to the U.S. Defense Department to consider that information could still be shared without any effect from a nuclear attack. After that, the ARPANET (Advanced Research Projects Agency Network) was created before it was developed to be the internet that we use in nowadays.

The official date, that is recognized as the origin of the internet, is on January 1, 1983 because a new communications protocol, named "Transfer Control Protocol/Internetwork Protocol (TCP/IP)", was created. The TCP/IP allowed different kinds of computers on

different networks to communicate to each other with ease. This made all networks could be connected by a universal language.

The invention of the internet

The internet was created from many pioneering scientists, programmers and engineers who created new features and technologies then finally become the internet in nowadays. The scientist named "Nikola Tesla" played with the idea of a "world wireless system" in the early 1900s. Paul Otlet and Vannevar Bush understood searchable storage systems of books and media in the 1930s and 1940s. However, the technologies to build the internet did not exist at that time.

In the early 1960s, MIT's J.C.R. Licklider popped the idea of an "Intergalactic Network" of computers. After that, the concept of "packet switching" was developed, by computer scientists, which is a method to efficiently transmitting electronic data that would become the major build blocks of the internet in the future.

According to the above mentioned, ARPANET was the first prototype of the internet in the late 1960s. The ARPANET used packet switching to allow multiple computers to communicate on a single network. On October 29, 1969, the ARPANET was able to deliver its first message: a "node to node" communication from one computer to another, using the first computer that was located in a research lab at UCLA and the second computer was at Stanford. However, this first time delivery was still imperfect, the sending of message "LOGIN" was delivered from the first computer to the second computer with only the first two letter.

In the 1970s, scientists named Robert Kahn and Vinson Cerf developed TCP/IP that was a communication model that set standards how to transmit data between multiple networks.

The ARPANET adopted TCP/IP on January 1, 1983, and then researchers began to assemble the "network of networks" that because the modern internet. After that, in 1990, the World Wide Web was invented by computer scientist named Tim Berners-Lee which led the internet was more recognized. The World Wide Web became to be the most general way to access data online in the form of websites and hyperlinks which helped popularize the internet among the public. This was a significant improvement to develop the vast trove of information that people access today.

The internet in nowadays

The internet is the world's most popular computer network which is nowadays used by more than 2 billion people around the world. The internet is decentralization with nobody owns or controls it but operated by thousands of different organizations for their own networks. The majority of people who access the internet through a web browser which is very popular that led people misunderstand that the internet and the web are the same.

The internet contains the three fundamental parts by following;

1. The last mile

    The last mile is the part of the internet that connects homes and small businesses to the internet. Furthermore, people can access the internet through their phones because the last mile has the towers to spread the signal.

2. Data centers

    There are server rooms that store user data and host online apps and contents. These rooms are called "Data centers". Some are operated by large companies such as Google and Facebook while others are commercial facilities that provide service to many small websites. The advantage of the internet from Data centers is that its speed is very fast and

it is capable to serve many user at the same time. Data centers are also able to be located anywhere in the world.

3. The backbone

    Several long-distance networks, mostly on fiber optic cables, are linked together to carry data between data centers and consumers. This network is called "Backbone". Normally, networks are connected together at internet exchange points which are usually located in major cities.

Conclusion

The internet started to be used by government researchers to share information in the 1960s. Then, the importance of the internet was recognized again from the Cold War which led to the invention of the ARPANET. After that, in the 1970s, TCP/IP was invented by a computer scientist and it was adopted by the ARPANET on January 1, 1983 which officialized to be the origin date of the internet. In 1990, the World Web Wide was invented by a computer scientist which became the most common way to access the internet for people in nowadays. The components of internet, that we now know, are the last mile, data centers and the backbone. The last mile allows people to access the internet from their places by using computers or phones. Data centers are server rooms that store data and online applications and contents to be accessed on the internet. The backbone makes long-distance networks to be connected together which carries data between data centers and consumers.

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