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Technology, Computer

The Social Impact of the Internet Past and Present

Visionaries like the great Doctor Vannevar Bush once dreamed that knowledge shall be shared and communicated over large areas by a " memex" machine, and that this " memex" shall revolutionize the way we learn and interact with each other. Doctor Bush in the year 1945 may have not predicted the actual computer or the Internet of today, but his startling predictions did point in one direction, society will change drastically by this invention. The Internet is and will continue to become a great impact in our society from its feeble beginnings as a governmental project, to the amorphous network of millions of computers, it is an overriding force in all aspects of society from global politics to everyday affairs like grocery shopping.

In order to predict where something is going to end up and where something is at the present moment one has to delve into the past in order to gain adequate knowledge of past trends. This notion holds true when discussing the Internet's future. One must know the past if the future is to be found.

The U. S. government, the father of the Internet was its main creator. The U. S. had a problem during the cold war. They needed a foolproof way to communicate after a nuclear attack. Its current network, if destroyed at any point would be rendered useless after an attack (Mayr 3). The U. S. decided to contact the Rand Corporation which was headed by Paul Baran at the time to invent a network that will stay running after a nuclear attack. What Rand came up with was a network with no central authority (4). If one node of the network were to go down, it would have a web of other connections in it so

that the network could still function. This new network was called " Arpanet" and started its operation in 1969.

By 1971 the success and popularity amongst intellectuals of Arpanet had risen, it had more than 23 sites on the network including international sites. These international sites were located in England and Norway. What made Arpanet so successful over just three short years was its capability to connect to it using any platform. Different computer operating systems could connect using the same network (Mayr 4-5). Colleges and government institutions dominated Arpanet in the sixties, seventies and eighties (Wright 24) The main use of Arpanet was to save on costly computer time. A person at a college could use a terminal on Arpanet to manipulate a computer thousands of miles away without paying, it saved computer time and plenty of money (Mayr 5). By 1982, Arpanet had began to decline, government funding for the project withered away and Arpa stopped managing the network. Arpanet was now its own entity away from the U. S. government, it then became to be known as the Internet (6). In 1986 the National Science Foundation wanted to use Arpanet to network super computers in universities from around the world for different research projects. When Arpa was approached with this plan the NSC became fettered with bureaucracy and staff shortages. The NSC decided to use their network that was identical to Arpanet. In 1986 the original Arpanet died and the Internet, as we know it today was born (7).

The first social interaction on the Internet started very early, around the year 1972 is when it really started to increase. The reason professionals started to

socialize on the Internet in the year 1972 is because this is the year that e-mail was invented. E-mail was the only way in which a person can talk to another person through the Internet. At first scientist used this as a way to exchange results of experiments but soon after they were using it mainly to gossip with their peers (7). Next to follow were Newsgroups, IRC, and FTP. Newsgroups are a type of message board, in which people can post their opinion in a pubic forum, and get responses from others. IRC (Internet Relay Chat) is a real time conversation. One person types a line of text and the other person responds in an instant, there is no message posting. And the latter, FTP (File Transfer Protocol) is used to transfer files and graphics using a computer as a host (Wright 20). In the late eighties and early nineties these elements of the Internet made it a haven for social interaction. Soon articles from every facet of life were being written. Howard Rheingold, a writer for The New Republic described the Internet as

" Every new communication, including the telephone brings people together in some ways and distances them in others. If we were to make decisions as a society about a powerful new communications medium, we must not fail to look for the human element" (Rheingold 1).

The human element of the Internet is alive and well. In the early nineties the Internet was much different than it is today. Writers such a Robert Wright predicted correctly that although print media is the preferred medium for many purposes, there will be a multimedia part of the Internet, the part that can bring humans together in a way that was never seen until now (Wright 28). Wright also believes that " The net is a microcosm of tomorrow's

macrocosm." The Internet is the technically advanced future that has been portrayed in many science fiction films (Wright 24). Although on both occasions Wright's predictions seemingly are true or are becoming true he also suggests the Internet " may be just another passing craze" (Wright 26).

Ultimately the single thing that has rocked the modern world about the Internet is the fact that it can be used to look up anything, anywhere, anytime if asked properly and at the right time. In 1993 a graduate from Oxford made this statement possible by creating the biggest driving force in the Internet's success, the World Wide Web. Tim Berners, commonly known as " The Father of the World Wide Web" wrote the first ever WWW client and server. (Mayr 9) The WWW is a multimedia presentation of information, graphics, sound and text of which can be manipulated by anyone with a computer. Information and social interaction sky rocketed into insurmountable numbers (Gates 135). The Internet, for the first time in its existence had become user friendly, and " regular" people were flocking to the on-line world in droves (Mayr 9). This medium once known as " cold and unemotional" was now the subject of hundreds of articles and praise. Writers like Howard Rheingold changed their opinions too, he " now understands how human this apparently cold medium of electronic communication can be" (Rheingold 1).

It is seemingly apparent that the Internet has already changed society's interaction with each other. You cannot watch television, go to the store or dial a phone number without hearing or seeing something about the Internet. People seek information about products on the Internet, because it is a

steady source of information. The usual stereotype of the Internet being populated by " geeks" is no longer accepted and is rather taboo. It is quickly becoming unheard of not to be connected to the Internet in some social groups. Mass media no longer popularize the familiar stereotype of computer nerds that need to see sunlight. The media is now realizing such stereotypes might distract attention from the potentially powerful opportunity for social cohesion on the Internet (Rheingold 1).

The result of cost effective communications to millions of people not only benefits business and citizens but it also has a great potential for political purposes. To address the main points of the Internet that attracts politics to it one must first look at what a political campaign needs, and what it lacks. A political campaign wants to expand its reach to the farthest possible point. It wants to inform and manipulate voters in an effective way. It wants fast communication and a great tool to mobilize itself. A political campaign wants to get a large amount of information to an enormous amount of people (Wright 24). These goals for a normal American political machine are not feasible because they just do not have the revenue to support the campaign. The Internet allows political organizations to do this effectively, and above all cheaply (25). Political parties, who are concerned with winning an election are not the only ones in the political arena that are opening their eyes to the Internet's capabilities. The Internet may bring a counterweight to well-moneyed interest groups; smaller and less powerful interests groups can now get the membership and their message out to the same amount of people. Whereas congressional leaders may not even take a second look at a smaller interest groups, the Internet is making it possible for these groups to

gain membership and political power in Washington (Salus 10). A prediction by Howard Rheingold suggests that

" If we don't lose the freedom to speak as we choose and if the price of access [to the Internet] doesn't restrict virtual communities to the wealthy, we have the opportunity to build a grass-roots electronic democracy." (Rheingold 1)

If Mr. Rheingold's prediction is accurate the twenty first century could see the end of democracy as we know it. It could show us a true democracy where all citizens have a vote on all pieces of legislature, a true democracy by definition, made feasible by the Internet.

The Internet started as a protection for communication after a nuclear war, evolved into a small link between universities and expanded into global society as a powerful force for community. The Internet has for some people made the world a much smaller place to live. Within the next century all predictions point to something fantastic that without a doubt drastically and positively change the very fiber of society.

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