Internet History

In the late 60's, the department of defense in the United States conducted an

experimental project in wide-area-networking called ARPANET (Advanced Research

Projects Agency Network) [1]. In 1969, the first ARPANET computer connected to a

node at UCLA and by the end of the year, three other schools were connected to the

network [1] - Stanford Research Institute, UCSB, and the University of Utah [2]. "All the

computers used different operating systems and they were able to talk to each other

across the network" [2]. As the years progressed, the network included research institutes,

laboratories [1], and other schools [2]. ARPANET also adopted TCP/IP data transmission

protocol and became an essential tool for communication [1].

"In 1990 ARPANET ceased to exist while the other networks started to connect

each other to create a larger Net" [1]. The Web was created when a researcher at CERN

of Geneva, noticed that many people were having difficulties in sharing information due

to a range of different network protocols and a range of workstation types. He proposed

an Internet-based hypertext system that would have linked together a single and easy-to-

use interface. He produced a WWW browser-editor, which read HyperText Markup

Language (HTML) documents from URL addresses [1].

In 1991, the Internet Society (ISOC) was founded; in 1992, the World Back went

on-line; in 1993, the first commercial graphical Web browser was released – Mosaic;

in 1994, the first search engine was created – "Yahoo" (Yet Another Hierarchical

Officious Oracle) [1]. On October 24, 1995, the Federal Networking Council

unanimously passed a resolution defining the term Internet [3].

FUN FACT: Charley Kline at UCLA sent the first packets on ARPANET as he tried to connect to Stanford Research Institute on Oct 29, 1969. The system crashed as he reached the G in LOGIN! [2]

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Internet Debate

"By 1998, approximately 40% of all U.S. households owned a personal computer; roughly one third of these homes had access to the Internet. Many scholars, technologists, and social critics believe[d] [...] the Internet [...] [was] transforming economic and social life" [4]. However, whether the changes were positive or negative were unknown, and were disagreed upon. Some scholars believed that the internet enables more and better social communication because of the reduced geographic distant or isolation brought on by stigma, illness, or schedule. Other scholars believed that the internet encourages users to spend more time communicating online talking to strangers instead building a more genuine relationship through physical interactions [4].

Whether the Internet was increasing or decreasing social involvement could have enormous consequences for society and for people's personal well-being [4]. Other technological artifacts have influenced society and people's well-being too. "Television, an earlier technology similar to the Internet in some respects, may have reduced social participation as it kept people home watching the set. By contrast, other household technologies [...] [like] [...] the telephone, are used to enhance social participation, not discourage it" [4].

If people use the Internet primarily for entertainment and information, the Internet's social effects might resemble those of television. Most research has concluded television watching reduces social involvement, physical activity, and diminished health (mental and physical) [4]. "People who report they are energetic and happy when they are engaged in active social interaction also report they are bored and unhappy when they are watching TV. Lonely people report watching TV more than others, and people report using TV to alleviate loneliness" [4]. Like watching television, using a home computer and the Internet generally imply physical inactivity and limited face-to-face social interaction [4].

"The Internet [...] has turned out to be far more social than television, and [...] the impact of the Internet may be more like that of the telephone than of TV" [4]. Kraut's research has shown that the dominant use of the internet at home is for interpersonal

communication [4]. However, their online social interactions and relationships do not imply that they are the same as physical social interactions and relationships [4].

Internet Research

In 1998, Robert Kraut and some researchers wanted to examine these issues dealing with the home computer and the Internet. Kraut et al. utilized longitudinal data to research the causal relationship between the people's use of the internet, their social involvement, and their psychological consequences of social involvement [4]. "Kraut et al. (1998) reported negative effects of using the Internet on social involvement and psychological well-being among new Internet users in 1995-1996" [5]. However, after a 3-year follow-up, Kraut et al. discovered through conduction of another longitudinal experiment that the negative effects of internet dissipated [5]. Kraut also found in their second research in 1998-1999, positive effects of using the Internet on communication, social involvement, and well-being [5]. Kraut also discovered that extroverts and those with more social support had more positive outcomes than for introverts and those with less support [5].

Kraut et al. also discovered our relationships are often associated with frequent contact, deep feelings of affection and obligation, which are known as *strong ties* [4]. This type of relationship is supported by proximity. Once *strong ties* are established, they can be sustained using telecommunications. The internet reduces the importance of physical proximity by connecting internet users to each other through networks. Some people find this helpful in building *strong ties*, whereas others find the types of relationships established over the internet superficial and easily broken bonds, infrequent contact, and narrow focus [4]. These types of relationships are known as *weak ties*.

Internet Negatives

With the great benefits of the Internet usage, it has become an unbreakable addiction for some individuals. Computers are as common as televisions in households; in addition, laptops and Internet-ready cell phones enable the Internet to travel with us. As of 2010, it was estimated that the percentage of population using the Internet

exceeded seventy-seven percent in the United States, twenty-eight percent worldwide [8]. Many believe that the Internet experience is the same as real life experience, but it is not. Although the Internet has many benefits, it also separates us from others while causing many unruly behaviors in the process.

The Internet is the information superhighway; it contains more information than we ever need. When we open our web browser, you get to your home page; from there, you can go to an unlimited number of destinations. Online, you can do just about anything: chatting, gaming, shopping and much more. People can literally spend their whole life on the Internet. They can attend an online school and get an online job. They can pay their bills and invest their money. They can order whatever they need online and have it delivered to them. The quirk is that you can do all that at the comfort of your own home in front of the computer screen. That is what happens when we use the Internet. As a result, the Internet cuts out the social interactions of our lives. With the Internet doing so many jobs for us, we have become lazy and non-social. We often ask questions like why go shopping when the Internet can deliver the products to your door or why go the library to research when you can do the same online. We may lose out on being social, but we save a lot of time. However, we spent the time we saved by using the Internet some more, such as MUDs and online gaming.

According to a study in The Chinese University of Hong Kong [9], heavy internet users were the least likely to eat healthy meals, exercise, or engage in healthy hygiene practices. Even though the heavy internet users were more likely to develop health problems, they were also the least likely to seek medical treatment and develop stress-relieving practices. Moreover, they had fewer friends and romantic relationships.

Internet Positives

The truth of the matter though is that all these things are simply symptoms of our own psyche as a race and if you look at them slightly differently you'll see that many of these 'downsides' actually represent progress and the positive effects of internet use.

Firstly, the accusation that the internet ruins 'real life' relationships is a bit of a misnomer and perhaps what people are forgetting here is that those people at the other ends of e-mails and on social networking sites actually are 'real life' people too. In the case of sites such as Facebook and Twitter, you are actually more in contact with people than you would be otherwise and in fact need never lose contact with anyone ever again. Romantic relationships also benefit from the internet. For example, internet allows long-distance couples to talk every night without paying a ridiculously long phone bill on Skype or MSN, and it even allows them to see each other on the webcam. For those who lack the social skills or the opportunity to meet people in the traditional ways, it can be a great way to meet someone that they might not otherwise. Taking away the 'physical' element to begin with may even make the relationship less shallow and get both parties to visit new and exotic locations.

The Internet potentially reduces the importance of physical proximity in creating and maintaining networks of strong social ties [4]. Unlike face-to-face interaction or even the telephone, the Internet offers opportunities for social interaction that do not depend on the distance between parties [5] or convenience, but rather based on common interests [4]. "People often use the Internet to keep up with those whom they have preexisting relationships" [4]. However, they have also developed new relationships on-line. The Internet allows social contact at any time, anywhere, and any circumstances, it allows people to connect with distant as well as local family and friends, co-workers, business contacts, and with strangers who share similar interests [5].

Extrovert internet users who use the Internet extensively reported more community involvement than those who rarely used it [5]. This might be because the users' knowledge of the world increases [5], and when compared with the rest of the world their local community may not be what they want – so they seek out to achieve this goal by being involved with the community.

In addition, the Internet affects our well-being, especially our loneliness. Extroverts who used the Internet more reported increased well-being, including decreased

levels of loneliness, decreased negative affect, decreased time pressure, and increased self-esteem [5]. This may be because extroverts take pleasure in interacting with other people through social gatherings whether online, through forums, chats, or emails, or offline, through parties or communal activities [4].

There are also positive effects of internet usage in business. While it's true that office workers are now spending less and less time 'relaxing' with no internet connection and so no capacity to work; it also means that they have to take fewer trips into the office and means that some people can now work entirely from home and set up their own businesses. Working from home means working from anywhere – while travelling, in a pub or while chilling in the hot tub. It also means fewer business trips abroad when people can make video conferences far more easily which means more time with the family and less damage to the environment. While many technologies have taken jobs away from the public, the internet has opened up a wealth of opportunities and heralded an age where anyone can be published and anyone can be an entrepreneur. Even if you only sell a few old items on e-bay, anyone can make money online.

With the 'One Child One Laptop' scheme [7] that's heading to Africa, and the large-scale attempts to provide the continent with a secure internet connection this could see one of the largest continents joining us online to share their views and earn themselves some money. This will give them access to all the education they could need as well as the resources they would need to make the most of that. Many of them could see themselves working their way out of poverty – and online they can expect the same wages as other continents as its faceless nature eradicates discrimination. One of the positive effects of internet use then is that it could help some people in escaping from the poverty trap.

The internet is full of filth, but it is filled with knowledge and information. The internet is essentially the largest library of all, and even if you do not aim to use it for learning purposes, it is hard to go online without learning something. The news for instance is flashed on most search engines and e-mail providers' home pages and it is far

too tempting not to use Wikipedia as a means to settle debates and disagreements. Wikipedia and other sites in general in fact provide almost everything you could ever need to know right at your fingertips.

Furthermore, simply interacting with people from other cultures is bound to help make you more cultured and worldly. Just getting to see other people's points of view on forums and in chat rooms will make you more open-minded and a more reasoned critic. Improve your knowledge and informing your points of view are two of the most important positive effects of internet use.

Kraut et al. discovered that the Internet provides many benefits – most of them favor extroverts. The Internet also hinders Internet users as well – most of these harm introverts. However, "whether the Internet will have positive or negative social impact, [...] depends upon the quality of people's online relationships and upon what people give up to spend time online" [5].

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