# T119 - Reliability and authenticity of information by Matthew

Here are some key terms that relate to this topic:

- Reliability dependability; the quality of being dependable or reliable
- Authenticity undisputed credibility

• Internet - a computer network consisting of a worldwide network of computer networks that use the TCP/IP network protocols to facilitate data transmission and exchange

I am sure many, if not all of you have at least once used the internet as a resource to help you with your homework. But have you ever considered whether the website you are basing your entire essay on is reliable or credible? This essay will help you understand why the internet is not always the best place to obtain information, and will give you tips that will help you distinguish the difference between an unhealthy website with spurious information and a helpful website with trustworthy information.

There are basically two reasons why you must be extremely prudent with online resources. First, anyone can publish anything on the World Wide Web. Yes, even you. Companies, organizations, educational institutions, agencies, communities, and individual people, can all post whatever they wish on the internet. Second, no approval is necessary. Unlike traditional information media, such as books, magazines, and newspapers, where information was processed by some authority (editor or publisher), information on most websites are not reviewed or filtered. For these reasons one must be sagacious when deciding whether to utilize some random website.

The following excerpts are from two real websites.

Try to determine whether they are useful or not.

### Passage 1

As a bear begins to associate human presence with food, it may lose its shyness and pose an increasing risk to humans. Conflicts may also arise in situations where the bear regards a human as an immediate threat to itself, its cubs, or food cache (which is one reason that found animal carcasses should be avoided). In a chance encounter with a bear, the best course of action is usually to back away slowly in the direction that you came, speaking in a loud, calm tone to make sure the bear is aware of your presence and will not be caught off guard. The bear will rarely become aggressive and head towards you. In order to protect yourself, some suggest passively lying on the ground and waiting for the bear to lose interest. (posted by Anonymous)

### Passage 2

Not always content with foraged leavings, bears are also accomplished hunters, occasionally bringing down big game with their firearms. It is for this reason that bears remain popular and alluring targets for human hunters in search of a thrill: most deer, for example, are not armed, and quarry that returns fire adds a rush to a typical hunt. Bears prefer machete powered desert eagles, choosing to bring down large game in a hail of large knives and then finish the job up close and "execution" style. (posted by an Anonymous)

As you have probably already figured out, Passage 2 is the reason why you must not always rely on internet resources. Clearly, the information given by Passage 2 is inaccurate. So what are you to do now? Never use the internet as a resource ever again? Wrong. Fortunately for you, there are ways you can make sure that your internet sources are reliable and accurate. One way you can do this is by checking the author of the website. Ask yourself whether the author of the information is a recognized individual that clearly has some idea about the inherent topic.

This means, do not use information posted on a blog by webcam\_hottie, but rather use information post entered by a Dr. Smart, Rather. Another thing you should check is the provider of the website. This one is easy to figure out because it is usually given in the domain of the URL of the website. If you have information from a .edu, .gov, .int, .mil, or .org, you can be sure that the information is worth a lot more than information from a .com website. But be warned, information from a website wit one of the former domain suffixes could be slightly erraneous.

For example, a .edu could sometimes be a personal web page rather than one of an educational institution (i.e. http://www.jhu.edu/~jsmith/sports.html is the personal web page of jsmith, who is a student at Johns Hopkins University). Another example is a bad .gov website. Some governments, like the Chinese government, regularly post false propaganda that are not true at all. One must be careful of biased information. Another thing you should consider is the date of a website. Many websites are not updated and could have information that may have been true three years ago, but not today.

# or

### Reliability and authenticity of information by Sujit

Some of the information found on websites and other sources are not very reliable. Some of the information is just opinions from other people which other people think could be true. Some information are really biased and therefore can't be used unless you check other information about this topic. Or it could be real, authentic information. The problem is how you know which one is reliable and which one are not.

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The people who benefit from getting reliable information are the people who want to find out more about some particular topic. With this reliable information he can write books and other things to get money and to satisfy his own interest. One such people can be historians or professors who are assigned the task of finding something out.

Some of the advantages for these historians are that if the information is reliable they can make reports on the particular topic and also the report that they write can be used by other people and if there is come mistake it can be easily fixed. The disadvantage of this is that if the information is not reliable then the historians have to do extra work of finding the information of topic and cross-examining it with the unreliable source so that their might be some value in it. The problem with this is that it is very time consuming.

Like I said before the best way to solve the unreliability of the information is by creating some value for the information. You create some value by cross-examining it with another source. Once you cross-examined you can tell which part of the information is true and which part isn't. The part which is not true is probably not true because of biases added in their. But that information can be used by telling the readers why he was biased and how much of the information is biased.

The reliability of information affects only those who seek the information of that particular topic. It affects them because if the information is not reliable they cannot make an accurate report of the topic they were given to research. The information that the writer provides is seen by everyone in the world if you are a historian or something.

If someone finds something that is totally wrong in the report of the writer, the writer's life is ruined because they will think that all the report which he will give in the future will have mistakes in them. Because the writer didn't check if the information was reliable or not he will not be trusted to right good reports. The impact that this will have on the world is the world will have totally unreliable information. This will affect the writer who wrote the information and the people who are finding information for their topic.

The people who are responsible for the reliability of the information is the writer. He needs to find information and decide whether it is reliable or not. The person held accountable for the reliability of the information is The person who wrote the report which was used as a source of information. The problem is that the person who wrote it probably added his own biases, but the information is right. In that case you have to find other sources to look from.

There are no alternative solutions for this problem other than finding more information from other sources and cross-checking them to see what is agreed upon and what is disagreed. There is no easy way out. That is why it is not good to do things in such short time.

# T120 - Social consequences of addiction to the Internet by Oliver

The Internet is an endless tool to waste countless hours of time. The Internet is a medium that provides games, social networking (Myspace, Facebook), chatting (MSN, Yahoo!), emailing (Hotmail, Gmail) gambling, etc. While many of us feel it's perfectly fine to be spending so much time on the Internet, we could be in the early stages of what is called Internet Addiction disorder.

Online games are becoming a very popular use of the Internet. Many sites provide free, addicting Flash and Java games that can be played on any computer with a working Internet browser. Another very popular online game genre called the Massive Multiplayer Online Role Playing Game or more commonly known as the MMORPG. The MMORPG has become a major source of serious Internet addiction.

A very popular example of a MMORPG is World of Warcraft. There have been cases of where people have died playing the game. In June 2005, a child died due to parental neglect, as the parents were heavily addicted to the game. This issue of World of Warcraft addiction has become so prominent that the People's Republic of China have begun regulating the hours of playtime their citizens can have with the game. Although the ethics of regulation from the People's Republic of China is questionable, definitely something should be done about game addiction.

Another popular Internet phenomenon falls under the name of Web 2.0. Web 2.0, a term coined by Tim O'Reilly, refers to a new generation websites that strongly encourage collaboration between users. Social networking sites such as Facebook and MySpace are now becoming increasing popular for teenagers to be a part of. Teenagers are now spending increasing amounts of time developing their personal Facebook page, as opposed to paying attention to school work. A similar but less recent phenomenon is chatting. Chat programs such as MSN and Yahoo have also become a distraction for teenagers from their academic duties.

As people being spending more and more time on the Internet, so does the tendency for them do develop Internet Addiction Disorder. If you begin developing symptoms of Internet addiction such as skipping social activities to surf the Internet or beginning feeling withdrawal symptoms such as anxiety attacks and psychomotor agitation (lol), you may need to seek help. Surprisingly, there are actually rehabilitation clinics to deal with Internet addiction, which may come in greater need in the near future.

or

social consequences of addiction to the Internet by Andrew

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Internet addiction is the new problem these days. There is always someone that's online and doing something that's related to the internet. For example people play games such as World of Warcraft, typing an e-mail to a friend, calling friends over the internet using skype, others are using an instant messaging service over the internet and there are other things that I am not allowed to mention on the topic. People spend hours using the internet because it is such an addictive thing. Over the internet you are almost allowed to do anything that you can imagine...other than meeting a person in real life, though you can set up dates and meeting points.

The main source of people being addicted to the internet these days are all the games that are available to anyone who have access to the internet. These games could be anything from FPS's or first person shooters such as Half Life 2 to MMORPG's or Massively Multiplayer Online Role Playing Games lick World of Warcraft, to all the flash games of any genre on sites such as addictinggames.com. Some games are more addicting than others of course but that depends in the player. Half Life 2 has a wide range of players that can either play a single player mode or a multiplayer mode that requires an internet connection. This on multiplayer gives the player an experience to play with other players from around the world to see who has more skill at the game. This game can be addicting to people who like to have a different selection of fantasy based guns to take people out. There are different multiplayer modes such as death match where you are your own team and you try to score the most points in the game by looking for other players to kill. There is also Team Death match where you are within a team that takes on the opposing team.

World of Warcraft, an MMORPG, is one of the most widely played MMORPG in the world. This game has economics, different types of jobs such as tailoring, leatherworking, mining and blacksmithing, and of course there are other players that you can interact with in the game. There are 2 general factions, the Alliance and the Horde, where each faction has 5 different types of races to choose from, so in all there are 10 races in the game. Each race has their own unique abilities and be their own certain classes. There are many other aspects of the game that attract the players to buy the game and pay for it every month or so. This game has had made people loose their friends because the person plays it for so long he is like he is the character he has created in the game. The eye site of the person lowers just by staring at the screen for too long a day and not getting any other range from an object and so the eyes change to look at an object that is close to the face. This game has even caused people to loose their jobs. Also the game has even caused people to go to court for playing too long and having to have their game play time reduced. Some people even get divorced from playing this game too much for not paying enough attention to their partner.

Game addiction mainly causes people to loose their friends, girl friends, and wives. It also can loose your job, but of course you still got your job in WoW...It mainly depends on how much you are addicted to the game. If you decline having to go and chill with friends, you are really addicted.

# T121 - Social impact of global viruses by Simon

## What is a GLOBAL virus?

In an effort to sabotage other people's computers, malevolent computer programmers (sometimes called hackers) create software that can manipulate or destroy another computer's programs or data. The most common of such malicious programs are called viruses. A computer virus infects, or secretly runs on, a computer to cause some mischief or damage. Viruses are not spontaneous; people called authors create them.

Computers are an essential part of everyday life. As a result, there is a huge potential for monetary gains by virus authors. With sophisticated techniques on the rise, it is becoming increasingly hard for the general user to identify or avoid malware infections. Trojan viruses, for example, represent one of the well-known viruses throughout the world. Another example, the "LOVE BUG" computer virus, spread faster than any of its biological analogues possibly could. Within hours of its release, presumably in the Philippines, it had raced around the globe to infect government, business and home software via a Microsoft e-mail program, and millions of dollars in damage had been done. Viruses such as trojan viruses and "LOVEBUG" computer viruses are considered as a global virus because the impact of the virus itself was severe and global.

All viruses entail a certain degree of damage, but their impact, with some very prominent exceptions, is mostly social. Basically, although subjective, many of the global viruses contain any code to change data or otherwise corrupt the systems it invaded, its self-replication flood many networks with an overload of traffic. The purpose of these viruses is that they attack for mass electronic destruction. The "authors" of these viruses either want recognition as an infamous virus creator, or somehow attack specific data for their own beneficial needs. However, the reason(s) behind for authors creating viruses are one of the social impacts caused by other computer viruses. To expand further, this means that the infamous viruses have enlightened other virus authors to create their own.

In the past, a media frenzy erupted in March of 1992 in anticipation of the Michelangelo virus. Anti-virus groups determined that this virus was scheduled to awaken on March 6th, the birthday of the famous artist, and destroy all data on any infected machine. John McAfee, found of the company that produces McAfee Antivirus, predicted that between 50,000 and 5 million computers might be infected. The media jumped on these issues, bringing the public to a near hysteria. In reality, only about 20,000 systems were affected, and each subsequent year the number dropped drastically. Michelangelo's greatest impact was the mass media attention it received, encouraging virus authors to continue their malicious endeavors.

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As I have mentioned that viruses corrupt systems within the computer and network, the areas of impact that should be considered are social. Global virus can result in social damage. Such damage can include loss of reputation, scapegoating of the victims of a virus attack, or even legal action. A victim might be accused of failing to apply "due diligence," of being in breach of contract, or of being in contravention of data protection legislation. He might even be accused of implication in the dissemination of a virus, which is illegal in many countries (even those in which the actual creation of viruses is not in itself a crime). –I will discuss laws concerning viruses briefly after-

Global viruses can also be a strong force involved in the economy, specifically in the anti-virus program industry. The number of anti-virus products on the market began to rise around 1990, demonstrating that corporations were starting to respond to the growing public concern about viruses. In a more interesting perspective or as relevant, the second widespread stereotypical notion is that people who write anti-virus software also write viruses, in an attempt to drum up business for their products. However, there are no absolute certainties that no vendor or researcher has ever written a virus, released a virus, or even paid a bounty for samples of original viruses.

Laws concerning viruses are complex when the viruses become global(in terms of the impact). As having the adjective "global", the virus can be infected worldwide concerning worldwide bystanders. The problem lies on the fact that it is "worldwide". Since it is global, the laws concerning the viruses are not yet adapted in some countries, and the consequence for the authors of viruses may result in a subjective punishment. However, no hackers/authors do not want to get caught in U.S.A, as the punishment is severe – jail to 5-6 years. The problems of global viruses can be solved in various ways. One way is that users of the internet should be more aware of the skilful techniques the authors execute to make the viruses going and learn to prevent it. Another way is to constantly update on one's individual anti-virus program such as Norton or McAfee. Finally, as authors of the viruses being the obvious stakeholders, the complete discouragement of being a possible author of viruses should be diminished through education.

# T122 - Social impact of dependence on the Internet by Roger

## 1. What are the issues associated with this subject?

The emergence of the Internet as a worldwide system of communication, information exchange, education and commerce is opening up vast opportunities for more rapid development. It is eliminating barriers to communication imposed by space and time, leveling the playing field between rich and poor, and making possible universal access to information and services at very low cost. But recent research shows that some users of the Internet spend so much time logged on, that their personal and/or professional life suffers. This finding is connected by numerous accounts of people becoming "hooked" on on-line interactivity, accounts that have circulated in on-line discussions as well as in real life settings. It is becoming common to know of someone, or have heard of someone, that has become enamored with on-line activity to the point that they ignore important personal responsibilities. Factors associated with on-line interactivity that might be contributing to developing Internet Addiction Disorder (IAD) are distinguished from factors associated with people proposed to be most at risk for, or suffering from, IAD. Recommendations for treatment of affected individuals are offered.

# 2. How did this technology emerge?

In 1957, the Soviet Union launched the first satellite, Sputnik I, triggering US President Dwight Eisenhower to create the ARPA (Advanced Research Project Agency) agency to regain the technological lead in the arms race. ARPA appointed J.R.C Licklider to head the new IPTO (Information Processing Techniques Office) organization with a mandate to further the research of the SAGE (Semi-Automatic Ground Environment) program and help protect the US against a space-based nuclear attack. Licklider evangelized within the IPTO about the potential benefits of a country-wide communications network, influencing his successors to hire Lawrence Roberts to implement his vision. Roberts led development of the network, based on the new idea of packet switching discovered by Paul Baran at RAND, and a few years later by Donald Davies at the UK National Physical Laboratory. A special computer called an Interface Message Processor was developed to realize the design, and the ARPANET went live in early October, 1969. The first communications were between Leonard Klienrock's research center at the University of California at Los Angeles, and Douglas Engelbart's center at the Stanford Program. In 1983, it was replaced with the TCP/IP protocol developed by Robert Khan, Vinton Cerf, and others, which quickly became the most widely used network protocol in the world.

## 3. Who are the stakeholders?

The internet is a huge storage place for information where people publish and put a lot of different information on as part of their business or entertainment or other reasons for the general purpose of other people or the general public with internet access to view or use etc. So it depends mostly on the type of information or that's there for example: inappropriate material such as pornographic material that now with its introduction into the internet as provided easy access to the public especially the issue of underage children of basically any age. Also it is also a place where certain inappropriate materials are readily available to virtually anyone who wants to find out more. So there should stricter policies to caution these sites that provide these inappropriate materials. The publishers or management should be notified or told to follow the restrictions. There are some other sites that are not that harmful but are for good purposes or either for leisure or entertainment but tends to consume a lot of the users time because it is very attractive, fun, enjoyable, interesting, or simply something that they couldn't do in their

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everyday life. Online gaming is a typical example where users can spend hours gaming without realizing things around them.

## 4. What are the advantages and disadvantages for those stake holders?

The internet has a lot of sites where it was put there by people and all sorts of organizations etc. for basically for public viewing. The authors/creators usually put their names or some sort of reference. The advantages of these people putting their work on the internet is that people may actually benefit from it especially for educational purposes and they can either receive credit or may not it they choose to remain anonymous. People can use it a lot to gather or do research etc. and may order or purchase works from them.

But the disadvantage or these stakeholders is that people can pirate their work or use for other illegal purposes. People may become dependant on these specific authors and may demand or expect more works form them and may not be happy if products or work is not there. They may become unhappy and complain that the works/products or especially services are not ready for the customers.

### 5. What solutions can overcome the problem?

The growth toward reliance on the Internet has made it an easy global resource, which in turn allows everyone to cooperate in its construction, development and operation. This new reality has resulted in many stakeholders calling for a larger role in its international governance. International management of the Internet should be multilateral, transparent and democratic with the full involvement of stakeholders and roles of the various stakeholders. Specifically, policy authority for Internet-related public policy issues is the sovereign right of States and international organizations also have an important role in the development of Internet-related policies. Also the important role of civil society, and that of the private sector in the technical and economic fields.

There is indication that a vacuum exists within the context of existing Internet governance structures, since there is no global multi-stakeholder forum to address Internet-related public policy issues. It concluded that there would be merit in creating such a space for dialogue among all stakeholders.

There should be Internet public policy, oversight and the creation of an Internet Council in which Governments would take a leading role and other stakeholders would have an advisory/observer role.

### 6. What areas of impact does it affect?

Issues related to Internet governance do not generally affect just one country without also impacting others; in fact, they can impact all countries. Among the first Governments to encounter and address these issues was that of the United States. Most Governments of both the developed and developing worlds have now also become concerned by these issues. The participation of States in international Internet policy setting and oversight has become an important factor in giving them confidence to encourage investment, and to increase reliance on modern technology such as the internet.

National Governments are the most representative entities for the public, as they are appointed by the people, and they are responsible for the development of public policy within their territories. It therefore follows that governments must also be responsible for the setting of international public policy. The private sector and civil society cannot take the place of Governments in undertaking this role. However, their participation and support to Governments through the provision of advice and opinions is an important element in the successful execution by Governments of their policy setting and oversight role.

Since the Internet is a global network which knows no national boundaries, and the security of the Internet is of concern to all States and impacts their national security, it is not reasonable for one Government to undertake the oversight role on behalf of all the Governments of the world.

### 7. Evaluate the impact locally and globally.

Some research groups have come up with a list of possible outcomes of the dependence on the internet both locally and globally:

\* The Internet creates its own hierarchy of access that retains and may even worsen the gap between rich and poor.

\* The Internet's impact on physical and mental health has been largely unexplored in the public discourse. Problems with hands and fingers, with posture and with eyesight are the most common. But there are also incipient problems of Internet addiction and skewed mental development.

\* The Internet is becoming more and more like television, though an interactive one. TV turned out to be an 'idiot box' for many people. If it will be mainly an expensive interactive idiot box, the Internet won't be much of an improvement.

### 8. What are the ethical issues?

Ethically dependence on the internet is not such a good thing ex: in school a lot of students (including myself) use the internet to do assignments for it provides easy, quick, and vast amounts of information at your fingertips. But this is not what should be done for most of the work should be done using brains and self research to gain the information. But sadly the ethics in today's world regarding the use of the internet has declined dramatically for it does not usually require the users to raise questions about ethics when they are using it.

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# 9. Who is responsible?

The people responsible are basically everybody because it is us who use the internet for usually nobody forces us to open or use the internet. But it depends on how/why/when/where we use the internet that defines the "overusers" for the "users" for some it may take only a few minutes on the internet while others for hours or more. But also the readily availability with easy access that may cause us to use the internet longer. Also it depends on the user or it the user is a kid then the parents are responsible for not restricting the child to a limited number of hours.

## 10. Who is accountable?

Adults should hold themselves accountable for the excess use of the internet but in children's and young adults' case, then the parents or guardians should be held accountable for letting them use the internet. Also the internet cafes and similar service providers should be held accountable because they seem to attract a lot of individuals of all sorts and also in large numbers and is a growing market as the progress of the internet has grown and expanded too.

### 11. What laws apply?

The Electronic Frontier Foundation (EFF) is one possible source where culprits can be brought to justice as in serious cases such as programmers or people that are guilty of spreading a virus or corrupting a certain large organizations systems etc. But those that are guilty for attracting a lot of people and causing them to do illegal or unethical things on the internet such as online gambling or even activities that are popular among the teenagers and adults such as Fantasy Sports as in every sport. This can be a place where certain products or surveys are taking place. There are a lot of sites that contain a lot of users that are exposed to all sorts of advertisements where some are not even allowed there. Law firms are authorized to take legal action against certain companies etc. that have been issued with warnings not to interfere with the web at certain sites ex: beer adverts in school sites.

## 12. Are there alternative decisions?

There are alternate decisions such as responsibility of user's usage of the internet. The parents could maintain a limited time spent by the children on the net and restrict them to certain times. Internet cafes could alter their policies such as ID checks for underage people spending too much time on the net. Advertising of gaming sites should be advertised on a wide range and be limited to only a few gaming sites on the net.

### 13. What are the consequences of these decisions?

The biggest consequence of it all would be that not everybody will one hundred percent follow the regulations etc. such as parents will not keep a continuous look out for the time limit of their children's use of the internet and slack off or be too busy. Other sites will offer positions to advertisement for payment or private sites may do the same etc. Some may complain that the internet is not a place to be under control and should be free to everyone to use it to their desire or need. Some people may defend their right to ex: gamble online or to do gaming etc. Not all internet cafes will do full ID checks every time cause they know they will lose their customers if they do that every now and then.

### or

## Social impact of dependence on the Internet by Sujit

The problem with this is that you are totally dependent on the internet that you can do nothing without it. For example when the internet was not available you would have used a telephone directory to find the phone number of dominos pizza. Now a days because we have the internet we don't go through the process of turning pages. Instead we just click a few times on the screen and the information you need is their. Because we are dependent on technology, we are getting lazy to do things without the use of the internet.

The people who benefit by becoming dependent on the internet is the people who are too lazy to do some hard work. The advantage of this is that things can be done much more quickly. If you want some information you can go to Google and type what you want. You will find whatever you want in mere seconds. On the other hand by becoming dependent of the internet you are destroying the hardworking nature that is in you and your mind is not working as much as when you are really working hard.

One of the solutions to this problem is maybe building your mind power. When your mind power has reached ultimate level if you decide to do hard work you can do hard work because you are basically pushing aside the thought of having to use the internet. Another solution is put a device that allows you a certain time to use the internet. After that time has passed you can't use the internet. If you do this you are restraining yourself from always using the internet.

Dependency of internet has a huge impact on your life. By depending on the internet you are basically becoming slaves to the internet. Though you are using the internet, the internet is controlling your mind by making you lazy. Because we are already slaves to the internet it is possible that for life we will be slaves to the internet.

The number of internet users are increasing day by day. As more people become slaves to the internet, things like books are worthless. Therefore the career of an author or someone like that will be affected greatly. No one

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will read their books. They only care about founding things through the internet. This is also the impact it has globally too.

The people who are responsible for the dependency of the internet is the internet users. If their were no users, their would be no internet. Because people are using the internet there is an internet.

The people who are held accountable for this problem are the internet providers. As the number of people using the internet increases they do things that will call more people to use the internet, maybe some special features.

An alternate solution to this problem could be to use a book and the internet at the same time. If you are searching for information, to see if a piece of information of reliable you might use a book to confirm that the information on the net is reliable and is not made up. It makes you use two things at a time so your mind is always on full power.

# T123 - Etiquette rules for appropriate behaviour when using the Internet by Akira

First of all what kind of problems do the Internet have about behavior? For example people can post false information to confuse other users, or they can write bad things about friends or about some one's homepage. These examples are clearly not appropriate. Etiquette rules play an important role in the Internet. If it didn't exist the Internet would be a mess and it would be much harder to get information and chat rooms would be in chaos. The etiquette rules are the things that are keeping the Internet together.

Some issues concerning this topic is spamming, misunderstanding through the written text and flaming or out-ofcontrol ranting between e-mail correspondents. Spamming is where a person, company or an organization sends undesired email, which often advertises a product. Most of the time the message is sent to random recipients and it often becomes your bulk mail. Still some mails end up in your inbox by misspelling a spam filter trigger words. Also this can be a big issue with privacy because you can sometimes see the other email addresses that received the same message. Misunderstanding through the written text includes jokes taken seriously and capital letters. (Considered as shouting and can be offensive) Also flaming is an issue because exchanging emails and messages full of swear words cannot be considered appropriate behavior on the Internet

There are few possible solutions that can overcome these problems. For example we can censor the swear words that appear on chat, message board, or even on emails. Another way to solve the problem is to deny the access from the people who caused problems at the certain site in the past. This would keep the people who write swear words and offensive messages out from the site. Also we can write messages so they wouldn't cause any misunderstanding between the users. In case of spamming we can block all the messages that you don't have in your address book. This would prevent any unnecessary email out of your inbox. Unless the spammers are able to add their email address in your address book you would not be bothered by the junk emails.

First of all swearing or making fun of another user on chats or message boards would be considered very unethical, especially because the person making fun never met the user and doesn't know anything about the user. Also it would cause a unnessasry problem for the others who are using the site. Another issue is the spamming by the companies and individuals. This is because they are sending numerous undesired messages to random people for their own profit. Mostly everything that goes against the etiquette rules would be considered unethical.

The person who is responsible would be the person who breaks the etiquette rules. This is obvious because it means the person didn't act in a way that respected the other users. Even if you didn't know the rule it is still your fault because you didn't take the time to check out the rules for using the Internet but if it is intentional it is much worse.

So overall there are many issues and problems concerning the etiquette rules and appropriate behaviors when using the Internet. I think this comes from the fact that it is hard to determine what people are doing on the Internet because most people stay anonymous. Also most people don't even bother to read sites about etiquette rules because they think no one would find out what they are doing, and this is true in most cases. Still following the rules would be important to keep Internet pleasant.

# T124 - Social impact of the domination of English as the main web language by Tanay

The domination of English as the main language on the internet posses a "threat" towards many in this world as well as helps the social balance.

For starters, many people today cannot afford an education in a decent English teaching school, and therefore are restricted to the language of their country. It is estimated that out of the six and a half billion people that are living today, only one billion can speak the English language and only half of those people speak it fluently enough to receive an English speaking job.

The social impact is a serious issue. The fact that most companies such as "Google and Yahoo," are generally based on more results when searched under the English language causes outrage amongst many around the world.

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But, on the contrary, the English language is also beneficial to an equal amount of people. This fact goes back in history to the point that the English language has been in existence for a long while. The British who conquered and colonized several areas for the world had imposed the English language on many. After WWII, the Allied powers had generally imposed their language as well as their restriction on the countries they ruled. Therefore, today the several people that can speak the English language are trying even harder to educate those who cannot.

People around the world in countries ranging from Japan all the way to Bulgaria, have offered courses both in school and free outside educational programs to help others learn English.

So in the end, though English might be a restricting and unavailable language around the world, the web allows those who want to learn it better to go ahead and learn it. Also, those who are not offered it can learn it from those who are educated in it.

or

## social impact of the domination of English as the main web language by Sujit

One of the problem with English being the main web language is that more than half the worlds populations doesn't know English. Even if they know English they are not fluent enough or don't have enough vocabulary to understand things. The thing is that is probably going to be a cause of an outrage is the fact that most people who don't speak English are those who haven't been educated in my opinion or it could also be that they don't study English because they don't like English.

The people who gain from this are those who can read and write English. The people who can't read English is going to have a hard time understanding what says on a page. The people who can read English can read most of the sites because most of the sites are English.

The advantage of having English as the main language is that a little less than half the world population can read and right English. Because English is a common language and also at the same time an easy language it should be made the main language of the page. However, because English is the main language there are problems. Since most of the sites are English people who don't know English get angry really easily. How can they not? Most of the sites are in English. This causes serious problems.

One of the solutions for this is that you make an equal number of sites for each language. This might be impossible if you include minor languages. If you exclude the minor language this solution is good seeing that there is an equal number of sites for each language. People will most likely be satisfied with this because now there is more sites that are in their language than before.

There is a big impact on the main language that is used. Because the sites are mostly English more than half the world's population that doesn't read English wont be able search the net very efficiently, because they can read. Because of this the number of people using the internet might decrease and the people who can't read English will most likely find information from books.

The impact on the world is that people will start fighting over what should be the main language of the internet. I would say that English is good. But others might say some other language is good. It all depends on what you know and understand. That is why it is best if there is more than one major language for the internet. It keeps everyone silent and no one will argue about it.

The people who are responsible for this are the people who make the sites. Because most people who make the sites write English most of the sites are English. And the people held accountable are the people who allow the site to be. There are most likely able to read English so it is no problem for them. There are not many people who make sites using other languages. That's why English is the main language.

Something that can be done is give incentive for people who speak other languages to make sites. If they can make more sites that are of their language their wouldn't be much conflict. The consequences of this decision is that English will no longer be the only one major language in the web. That will not cause any uproar. Instead it will be quite fair for the people around the world because now they can use the web more efficiently.

# T125 - Social impact of theft of identity through the Internet by Alex Young

In today's cyberspace world, identity theft is a growing and a more damaging problem than ever before. Identity theft is when your personal information is stolen for fraudulent purposes. Identity theft can occur in the internet in several ways. One way is that a person sets a webpage that looks like a legal website but in fact is a site where they take your personal information and use it for their own benefit. For example, a person might set up a website that looks identical to the PayPal website and looks like a credible resource but in fact is not. These kinds of sites are called phishing which is a site that tricks customers into giving their personal information.

Now with the holiday shopping underway, consumers must be careful and be fully aware that whatever shopping site they go to, they must make sure that it is a legal and a credible site. This can be done by common sense. If a sight looks fishy, do not purchase anything from there but purchase it from a trusted site such as Amazon or shopping.com. Other ways of identity theft is through a keylogger.

A keylogger in simple terms is a computer program that captures the keystrokes of a computer user and stores them some place secret. If a person places a keylogger onto your computer you are at an extremely high risk of

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being a victim of identity theft because now they know your member name and your password and without realizing it, transactions are made through sites such as Amazon even though you have purchased nothing. Also, keyloggers can store important data such as the person's bank number, address, social security number and therefore, can influence that person's life in a bad way.

Another common form of identity theft from the internet is by someone sending an e-mail that asks you for your financial or personal information for whatever reason. People might think that it must be important and be dealt with right away and fills in the necessary information without thinking twice about it. Using common sense again, we can find a solution to this problem. If an e-mail asks about trying to find out about your personal information, double check to know where the information is specifically coming from. If it is PayPal it is generally safe but if it is from some site you have never heard before, then delete the mail and move on.

There are also other ways to further try and protect yourself from identity theft by installing anti-virus and antispyware programs which will inform you if the site might be a suspicious site and also delete possible keyloggers that might be already installed on your computer. Also in the new IE browser (Internet Explorer 7) and in Mozilla Firefox 2.0 a phishing filter is included which alerts you if you visit a website and the browser finds it unsafe and is a nice new add-on to the browser to have a safe browsing experience.

Therefore as we can see, the social impact is very big because it can ruin a person's life because of that person's data being stolen from someone else and also we must realize that there are bad people trying to cheat themselves in life by trying to steal your own personal information for the benefit of that person. Although identity theft will never be completely eradicated; hopefully in the near future consumers will be more aware of this ongoing crisis in order to not fall victim of the trap the phishers might place upon us by trying to make a fraudulent website in order to retrieve our personal data.

# T126 - Social impact of open access to unsuitable material on the Internet by Aditya

'Unsuitable material', in this essay, can be defined as anything, words or images or video, that can inspire an individual to do anything ethically incorrect.

### Issues associated:

This topic deals with a number of issues.

- 1) Encouraging acts of sexual nature in minors
- 2) Encouraging sexual violence in minors
- 3) Encouraging sexual violence victimizing children
- 4) Encouraging forceful sexual actions
- 5) Propagating hate for another or own race, religion, sex, etc.

6) Displaying images of vulgarity (such as the death of another human being), examples being those of Al Jazeera broadcasting killings of Afghan citizens by the Taliban and also the hanging of Saddam Hussein

7) Material that is simply biased such as an only Tony Snow view of prison human rights violations in Guantanamo Bay or Iraq. This can be coupled with censorship.

# Emergence of technology:

Unsuitable material, more specifically, pornography has been exchanged over the net for approximately the last 3 decades but has seen a colossal increase due to the presence of the world wide web in nearly every household which has access to internet databases. Also, a surge took place after the advent of P2Ps(peer-to-peer networks) with clients(people who exchange information(data or files) over P2P networks) finding it increasingly easy to satisfy their perverted needs. Also, videos like that of Saddam's execution are spreading like wild fire in the online community.

## Stakeholders:

On the one hand, in the case of politics, Presidents like George W. Bush and Governmental officers have much to gain with an image which is precisely why many videos like those of atrocities that occur in Afghanistan are aired using the internet as a medium. Also, it can also affect the governing body of a nation by preventing messages of hatred from being viewed by others possibly sparking off a civil war. Also, the stakeholders are a people who are not necessarily being fed the correct information of the whole story.

In the case of internet pornography, the stakeholders are perverts who get pleasure from viewing child pornography or just any genre of pornography. These people can go onto become pedophilic and therefore commit actions which involve children which are sexually explicit. They also abuse children(also stakeholders) sexually, and scar them, many times permanently, both physically and mentally.

#### Advantages and Disadvantages:

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There are absolutely no advantages, in my opinion. The disadvantages are plenty. I have numbered the ones I thought of above.

## Solutions:

It is difficult to overcome this problem because of the tedious nature of the task of cyber-policing. There are some ways to overcome this problem to a certain extent but even though efficient, they can't overcome the problem completely, both due to the presence of hackers and a large population.

One such solution is the Access to Information Monitoring Tool. For more information, go to <u>http://www.justiceinitiative.org/activities/foifoe/foi/foi\_aimt</u>

### Areas of Impact:

A large area it impacts is the black market. Pornography has a flourishing market for porn in almost all countries. Also, like I mentioned above politics can influence the airing of videos on the internet.

### Evaluation of impact locally and globally:

The impact is more on a global society both because of porn markets in countries across the world and the advent of the internet. Some countries like Saudi Arabia and China are less subject to issues like pornography due to censorship laws but still permit the airing of anti-US videos.

# T127 - Ethical issues related to misuse of the Internet, for example, spamming by HeeJun Son

As Internet is being used everywhere in anytime and more people demand access on the Internet, problems concerned with misuse of Internet has arisen seriously. Misuse of the Internet means some people take advantage of the Internet by utilizing illegal or immoral means to get benefits themselves. The common examples of the misuse of the Internet are spamming (especially that of e-mail), online fraud (identity theft), virus, pornography (particularlly child porn) and many more.

Everyday when we check our e-mail, we see unwelcomed mails like ones that advertise "hot" girls or new innovative products. Most spam mails are sent from unknown guys who have very strange mail address. Those mails are one sort of spamming. When we talk about spamming, most of the time we assume it is e-mail spamming, because it is the most common form of spamming, but the term can be used sin some other media of communication. Spam in blogs, mobile phone messaging spam, and instant messaging spam are other kinds of spamming. By the definition, spamming means the abuse of electronic messaging systems to send unsolicited, undesired bulk messages.

E-mail spamming, the most common form of spamming, is favored by spammers because it does not have any cost except their effort to find the mail address lists, and it is easy to send (you just have to copy the context, paste and click "send" button). Although it may be easy for spammers to send spam, it is very annoying and vexing for recipients because of hard working of deleting the whole bulk of spam mails. When we say email spam, it can be confused with legimate commercial email. There is a difference between spam and legimate commercial email: spam is sent without permission of the recipients and most of the time it contains many tricks to avoid e-mail filtering while legimate commercial email is sent with permission only when you have agreed to receive the mail. So email from Apple advertising new iPhone is not spam, but the legal email since that mail wouldn't have come if you had not agreed with Apple.

Some evil spammers create and send email viruses to innocent people so when they open the mail, their computers are infected. There can also be an infection of viruses when you open the website designated to contain viruses. Some programs you download from the Internet may contain some form of viruses. As we see from these common examples, there are a lot of problems concerned with viruses on the Internet.

Online fraud has become one of the biggest problems caused by the misuse of the Internet. Someone may represent himself to be an administrator of a famous bank, and ask you for the password of your saving account. Younger people who know about online fraud more than elders somewhat often do not get in much trouble. But relatively older people, who do not have much knowledge of Internet, can get involved in a lot of trouble. They are quite easy to deceive in swindlers' view.

As we can see from email spamming, virus, and online fraud, there are a lot of ethical issues concerned. We should quickly find a way to solve these kinds of problems as soon as possible. But we know it is not going to be easy thing to achieve. It will take long time to solve problems of misuse of the Internet. Bill Gates, speaking at the World Economic Forum in January 2004, mentioned that Microsoft was working on the solutions to spam so that spam would be "a thing of the past." But no one can predict when it is going to be.

# T128 - Ethical considerations of IT-rich versus IT-poor nations as a result of differing access by Kent

Though information technology has greatly developed, the development did not occur at the same rate around the world. Such innovations have concentrated in powerful nations and many poor countries were left behind.

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Thus there now are IT-rich and IT-poor nations and there obviously are many disadvantages for IT-poor nations compared to IT-rich nations.

The main problem that this fact that information technology is not distributed equally throughout the world causes is that it widens the gap between the rich nations (as in wealth) and the poor nations. Information technology increases efficiency and it brings wealth to the country. It is obvious that a firm that utilizes computer will be able to lower their costs, have a better performance, and basically achieve a greater success than a firm that has no advanced physical capital.

IT-rich nations will flourish more and more by the technology while IT-poor nations strive to achieve standard in technological development. Also, the lack of numeral services such as banks over the internet is a disadvantage. So, what happens is that the people who has ambitions and wants to live a better life will try to leave their home country and go work in IT-rich nations. Because skillful human resources seek their success outside the nation, such nation falls behind even more.

Information technology also has great impact on education. In IT-rich nations, these technologies are integrated in their school curriculums. So people living in those nations are normally used to computers and various programs such as Words, Power Points or Excel from young ages. It is only in these IT-rich nations where higher level of such technology can be studied. Therefore, more and more efficient and useful human resource are created and these people creates better systems and technologies in these places while the only people learning higher level technology has left the place in IT-poor nations.

Because of this, most of the workers in IT-poor nations who are supposed to bring wealth and technology to the nation are not skillful enough. This lack of skill is why most of the labor forces in these countries have to do the hard physical jobs for companies owned by nations outside and the skillful people in their country gets the most money with less and easier works. This is how the IT-rich nations get richer and richer in both IT and wealth while IT-poor nation has to work harder and harder to catch up. In order for the IT-poor nations to catch up to the rich world, an advance in educational curriculum is inevitable.

There of course are ethical issues related to this matter. It is unfair for people who were born in IT-poor nations because chances in their lives are limited. Ethically speaking, ideally every human beings are supposed to have equal chances for success and happiness (though it is impossible), and it is the IT-rich nations' responsibility to help such nations and share their technology and wealth. The solution to this matter is probably well organized educational system provided by the IT-rich nations for the human resources in IT-poor nations.

It efficient people that brings wealth and technology to the country (wealth and technology comes together and the other brings the other) and it is good educational system that creates those. It should not merely be a curriculum whose only goal is mass production of workers like almost all curriculum throughout the world is but should contain learning of being business owners because it is always the businesses that directly brings wealth to the nation and if the nation had lots of workers but no business owners, the workers will have to end up working for companies of other nations as they are now.

# T129 - Ethical considerations relating to the use of encryption by Sung-Hwan

An encryption is one of the cryptology that is used widely in the world these days due to the development of communication. An encryption is a process of making the information unreadable to others those that sender doesn't want to be read. There is lots of encryption, but basically it changes the information into other form and it requires a key to decrypt it.

For example, if I were to send an e-mail "How are you?" to my brother, this text will be encrypted by a computer following a certain rule. Therefore, if a rule was to substitute each letter with the letter that is two down from it in alphabet, then 'H' will become 'J', and 'o' will become 'q'. My encrypted e-mail will look like "Jqy ctg aqw?", and others looking at this text will see nonsense. But my brother's computer will decrypt this text using a key, or a rule which is 'substitute each letter with the letter that is two down from it in alphabet' and get the original text I am sending.

Since this encryption method is very difficult to solve without the key, communication systems use this. So, is this encryption ethically wrong to use? Not at all, because it is widely used in the world, and if everyone is using it, it is very unlikely that it is ethically wrong to use encryption. Also, this encryption is used to defend the information from others so it is a good use.

This encryption might make the job harder for hackers and the government officials, who are trying to catch terrorists and bombers, but I think government could somehow retrieve information from us to due to this reason. Since the government was the one who developed encryption first in secret for the military use which was found out by public and now used in the communication. Therefore, even though encryption seems very safe, I think government already has some secret thing that will be able to penetrate the encryption. For example like a secret machine called 'TRANSLTR' made by government in the book "Digital Fortress' by Dan Brown, that is able to break through any codes.

Since making the job harder for hackers isn't ethically wrong, and government might not be affected by encryption, I think it is ethically approval to use encryption. Therefore, encryption is an ethically approval method to use, since it is used as a security and a protection of a privacy.

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# T130 - Ethical considerations relating to workplace monitoring by Oliver

In order to ensure that the employees are being productive at the office, many corporations have taken up the practice of workplace monitoring, the act of eavesdropping in on telephones, internet activity, voice mail, etc. to ensure that their employees are fooling around at work.

According to privacyrights.org, surveys have revealed the office place monitoring has become an increasingly popular procedure. A survey from the American Management Association reveals that 75% of employers monitor their employee's internet activity, 65% of employers block 'inappropriate' web sites, over 50% of employers read employee e-mails, and 33% of employers keep track of keystrokes made by their employees. Out of all the negative statistics, the survey also revealed some positive news, reporting that 80% of the employers inform their employees that they are monitoring them.

The practice of workplace monitoring is generally unregulated. Some laws grant the employers rights to do monitor their underlings, and there a few precedent cases that usually resulted on the judge favoring the employer over the employee in a legal battle for privacy at the workplace.

This practice obviously raises some important ethical issues. For one, you seemingly abandon any constitutional rights you have by stepping into an office. Nothing you say can be taken as private. Don't be surprised if employers are placing bugs by the water cooler. It's hard to say how much personal information you give away to the company by working for them, besides any personal information that you have already voluntarily given them.

A lot of the monitoring that is being done is carried out by software. It is definitely a possibility for this software to be compromised by a computer expert or hacker. This hacker could then obtain all the personal information that the company ever gathered about you and use it in ways that would harm you.

Also, consider the people who have easy access to the personal data being gathered about you? Do you trust them not to abuse that information? Do you trust them not to blackmail you with your secrets into putting a couple more hours of overtime for the company?

There are no real solutions to this ethical issue, but awareness of workplace monitoring is a good step. For those who get a job at an office, don't play Solitaire or go to Yahoo Pool on your work computer (play it through a proxy on your laptop instead). Whenever you call your parents or friends at work, watch what you say and don't put your office working friend in a difficult position (in other words, don't invite them to do something illegal on their work phone.) Try and keep a cell phone around, and have your friends make personal calls through your cell phone instead. Until workplace monitoring becomes illegal, waste your time in a careful manner.

## Knowledge of technology

In order to study and evaluate the social and ethical issues involved in the use of the Internet, the student must have an understanding of related technological concepts. These may include:

# T131 - Key terms by Ronald

# Internet protocols, for example, HTTP, FTP, TCP/IP, cookies, listserv, web cam, Internet languages

Internet protocols, for example, HTTP, FTP, TCP/IP, cookies, listserv, web cam, Internet languages, netiquette, Intranet, URL, hyperlink, bandwidth, WWW, browser, search engine, e-mail

## **Internet Protocols**

These are the datagrams or packets that carry blocks of data from one node to another. These are used in the internet.

# Http

This stands for hypertext transfer protocol, which is a method used to transfer and carry information on the internet.

# FTP

This stands for file transfer protocol, which is used to connect multiple computers over the Internet so that computer users can transfer files and perform file commands on other computers.

## TCP/IP

This is the transmission control protocol, which is a virtual circuit protocol that is one of the core protocols of the Internet protocol suite.

# Cookies

Cookies are parcels of text sent by a server to a web browser and then sent back unchanged by the browser each time it accesses that server. These are used for authenticating, tracking, and maintaining specific information about users, such as site preferences and the contents of their electronic shopping carts.

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## Listserv

Listserv was the first email list management software product of its kind. Before its invention, all email lists had to be administered manually. The word "listserv" is now often used as a generic term for any email-based mailing list application of that kind.

## Web Cam

Also known as a webcam, and real camera, is a real-time camera that can be used on messaging services and on the internet. Web-accessible cameras typically involve a digital camera which uploads images to a web server, either continuously or at regular intervals. You can do this by attaching the camera to the computer.

## Internet Languages

As of January 2007, approximately 1,094 million people worldwide use the Internet, according to Internet World Stats. The top 5 languages are English, Chinese, Japanese, Spanish, and German (in order of greatest to least).

# T133 - Means for blocking access to information by Su

The Internet has become an important toll for finding health information, especially among adolescents. But many computers have software which is designed to block access to some unhealthy information namely pornography (most important reason), gambling, hate speech and so on. The Internet, including e0mail, Usenet, and the World Wide Web, provides those connected to it an unprecedented amount of information usually at one location: the home, office, library or school computer.

The information available on the Internet is seemingly limitless in quantity and variety, and this lack of boundaries is possible because anyone, from a schoolchild to a corporate CEO, can post anything in cyber public view. As we know, information should all be free to every individual and every person has their own right to whether choose to post out their information or access to other information.

However, recently blocking access to information becomes a very popular and controversial topic over the whole world. Like everyone else, we are limited in access some information. Whether you want or not, people would never get completely free on access information. For example, at home parents may use KIDSENT which allows parents and guardians to "block" their child's information. In school, teacher will also set the limitation block the website what they think are not good for us.

Furthermore, different countries will also set different limitations---blocking variety information which they think will threaten the security of the country. The blocking program let people to block whatever they want, and thus in some extends it already invade human privacy.

The initial response to this behavior is a technological one. Concerned individuals demanded a means of controlling what the Internet brought into their homes, and predictably, various businesses provided one----the Internet blocking software with names like "Net Nanny," "Cyber Sitter" and etc. These products marketed themselves as convenient ways to keep pornography, pedophiles, and other objectionable away from children and teenagers.

The ordinary programs block every website that contains the word porn or other relative words. Therefore, sometimes they will also block the websites that do not contain adult or unhealthy content. Recently, Internet blocking programs achieve a huge improvement. The new programs allow user to get into the detail and try to increase the accuracy of the blocking system. Technology provides us a good opportunity to the individual or even the government to block access to any information which they do not want other people to know.

Yet the new question is that shall we use it or not. The essential purpose to blocking access to information is that prevent children or teenagers access unhealthy information. For example, if we don't do that, children may accidentally get into a website which contains lots of violent. Little by little, because they do not have ability to decide what is good for them.

The unhealthy contents in the website may even "poison" them, children may just do what shows in the websites and perhaps will think that what they do is all right. In the future, they probably may become the criminals or terrorists. Although, I know this sound like a joke, in fact we all know small kids like to copy their parents or adult behavior. What these people do will all have a great impact on children's future. But this does not only apply for children but also for teenagers.

Too many allurements in the Internet, for us we should know what is good and what is bad for us. Under this circumstance, I think blocking access to some information is good for the whole society.

Like everything has tow sides, blocking access to information will also have a negative impact on the society and individual. The blocking program invades our rights to access any information in the first place. Second, the incompletely blocking program sometimes may block some website that you do not want to block, waste your time.

The last one is that personally I believe that blocking access to some information might have a negative impact on teenagers and small kids. Since, people all have curiosity to the things when they are not allowed to do so. Same reason, if we just use blocking as the only way to protect them from the unhealthy information. In the end, it may turn up that more children and teenagers try to access these information.

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The more you don't want them to know, the more they actually want to know. Thus, personally I believe blocking access to information is not a suitable ways. It'd be better that we use more morality and social education to let them understand the dangerous of this unhealthy information at the same time. Let them understand why teachers or even parents forbid them to go to some websites.

Tell them the truth, not just use regulation. Also if we think from a different angle, then it is not only children's fault to go to this unhealthy website. What matters more is that we need to find out who actually made these websites. Students and children are just the victims, the one who build the websites is the actually the killer. Society needs to cut the foundation of this, if we can reduce the number of them, they in the end we do not need to block the websites anymore. And for me, this is the central ways to solve this problem.

The social issue is that it will prevent people especially teenagers and children getting bad from these unhealthy information, improve the overall social security. The more important thing is that instead of putting times on these unhealthy stuff, students may spend more time in their work, learn more knowledge then before. In the future, they can contribute to the country.

# T134 - Features of a web browser by Wilanth James

A software application that enables a user to display and interact with text, images, and other information is a web browser. It is typically located on a web page at a website. Text and images on a web page contains hyperlinks to other web pages. Web browsers allow you to access information easily and quickly.

John Bottoms created the first browser, Silversmith, in 1987. It included an integrated indexer, full text searches, hypertext links between images text and sound and a return stack for use with hypertext links. It included features that are still not available in today's browsers. These include capabilities such as the ability to restrict searches within document structures, searches on indexed documents using wild cards and the ability to search on tag attribute values and attribute names.

Variations of different browsers are available, but the Microsoft Internet Explorer, Firefox and Netscape Navigator are the most popular. At one time, Netscape (now owned by AOL) and Microsoft invested so much money into their browsers that competitors found it hard to keep up. The battle between the two companies to dominate the market led to continual improvements to the software.

The browser has several buttons across the top of the browser window that allows you to navigate around sites as well. These buttons include the home button, the back and forward buttons, the stop button and the go menu.

No matter where you wander on the Web, the home button will bring you back to the home page you have specified in your Preferences. The back and forward button will take you forth through the pages you have visited, since starting up the browser program. The stop button allows you to stop an attempt to retrieve a page from a Web server.

If a page is loading very slowly, you may want to use the Stop button to change your mind and look at something else. The Go menu maintains a list of the pages you have visited since starting the browser program. You can go back to any of these pages by selecting their titles. This is more efficient than clicking on the Back button repeatedly. The Go menu is erased when you close your browser.

Under the toolbar, there is a box labeled "Location," "Go To," or "Address." This is where you type the URL of a website you want to visit. After you enter it, press the Return or Enter key to access the site. You can also do this by clicking on the "Go" or Arrow button to the right of the address box.

The menu bar is located along the top of the browser window. This bar offers a selection of things you can do with a web page, such as saving it to your hard drive or increasing the size of the text on a page. Many of the choices are the same as the buttons on the toolbar.

Netscape Navigator, Internet Explorer and Firefox have a small graphic in the upper right-hand corner of the browser. When this image is animated, it means that your browser software is accessing data from a server. The server can be located across town or on another continent. Your browser downloads these remote files to your computer, and then displays them on your screen. The speed of this process depends on a number of factors such as the speed of your connection, the size of the files you are downloading, how busy the server is and the traffic on the Internet.

At the bottom of your web browser there is the status bar. It displays the progress of web page transactions, such as the address of the site you are contacting, whether the host computer has been contacted and the size and number of the files to be downloaded.

Different browsers can be distinguished from each other by the features they support

#### features of a web browser by Nitish

A web browser is an application which allows users to view a webpage and interact with information on the WWW or a local machine.

Web browsers allow users to quickly view and access the information they need, and with ease. A user can open multiple instances of browsers, allowing him greater functionality and a wide range of options. Examples of web browsers include Firefox, Internet Explorer, Opera, etc.

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Some features of web browsers are listed below:

- Support for most file formats, including flash, JPG, wmv, movies and lots more.
- Support for languages such as JAVA, ruby, php, etc.
- Enables real-time protection for the user, such as Popup blocker and phishing filter.
- Autocompletion of URLs.
- Bookmarking system so that the user can bookmark his favorite sites

- Tabbed Browsing (now in IE too) so that the user can open multiple instances of windows in the form of tabs, without actually opening a new window. This saves memory (RAM) and time.

- Filters such as Adblock (Firefox), phishing filter, popup blocker. It also includes restrictions such as not to execute javascript, or not to display images at all (to provide protection ofcourse, from malware and content which installs itself)

- Annoymity . Most browsers have a function called proxies. This enables the user to change his/her IP address so as to prevent restriction to whatsoever reason. For example, in megaupload.com, Japan is blocked from downloading stuff (THIS IS TRUE). So, if I use a proxy, this would help me get past the restriction.

- The best feature I would say is the prescence of RSS. RSS is a type of feed system which frequenty updates digital content, such as blogs. Most web browsers have RSS enabled. For example, if I sign up for a RSS feed of Yahoo news, then I would get live news updated frequenty. I have done this in the past.

- Speech Support. Most browsers have speech support, enabling the computer to READ what is written. This can be useful for the disabled who can't use computers that well, or who are physically not able to read.

As we can see, web browsers are getting better. Who knows what will happen to the future web browsers. But for now, those are the features.

# T135 - Comparison of Internet and Intranet by Alex with additions by Nitish

Although intranet looks as if it is a spelling mistake of internet or just another way of spelling internet, in fact they are two different concepts. Many people tend to mix up their meanings and confuse them. In the virtual world, they are two totally different concepts.

Internet in simple terms is a global network connecting millions of computers throughout the world.

The Internet is the worldwide, publicly accessible network of interconnected computer networks that transmit data by packet switching using the standard Internet Protocol (IP). It is a "network of networks" that consists of millions of smaller domestic, academic, business, and government networks, which together carry various information and services, such as electronic mail, online chat, file transfer, and the interlinked Web pages and other documents of the World Wide Web. (WikiPedia.org)

The internet uses the TCP/IP network protocols for data transmission and exchange. The TCP/IP stands for Transmission Control Protocol and Internet Protocol, respectively.

The Transmission Control Protocol (TCP) is one of the core protocols of the Internet protocol suite, often simply referred to as TCP/IP. Using TCP, applications on networked hosts can create connections to one another, over which they can exchange streams of data using Stream Sockets. The protocol guarantees reliable and in-order delivery of data from sender to receiver. TCP also distinguishes data for multiple connections by concurrent applications (e.g., Web server and e-mail server) running on the same host. (Wikipedia.org)

The Internet Protocol (IP) is a data-oriented protocol used for communicating data across a packet-switched internetwork. IP is a network layer protocol in the internet protocol suite and is encapsulated in a data link layer protocol (e.g., Ethernet). As a lower layer protocol, IP provides the service of communicable unique global addressing amongst computers.

This is a basic standard to transmit data over networks and is also the basis for internet protocols. Internet Protocol is a standardized method of transporting information across the internet through packets of data. The Transmission Control Protocol makes sure the packets of data being shipped and also being received is in the right and intended order. The TCP/IP is used because this allows all the networks to work as one flawless network for all users. Therefore as we can conclude from these definitions, when people talk about the internet and they talking generally about the world-wide web as many things are involved in sending and receiving information from the use of the internet. The internet is a place where most people do things like -

- Email
- Collaboration
- File Sharing
- Streaming Media
- VOIP

Notes compiled by: Mohan Robert

### - Remote Access

Intranet meanwhile is a more specific concept and one area of knowledge about the internet. Intranet is a private network within the company or an organization that uses the same protocols as the internet.

An intranet is a private computer network that uses Internet protocols, network connectivity, and possibly the public telecommunication system to securely share part of an organization's information or operations with its employees. Sometimes the term refers only to the most visible service, the internal website. The same concepts and technologies of the Internet such as clients and servers running on the Internet protocol suite are used to build an intranet. HTTP and other Internet protocols are commonly used as well, especially FTP and e-mail. There is often an attempt to use Internet technologies to provide new interfaces with corporate 'legacy' data and information systems.

Briefly, an intranet can be understood as "a private version of the Internet," or as a version of the internet confined to an organization.

The meaning of internet can also be more specifically described because the internet can communicate with machines on other networks and send files and data as well as other information back and forth. The internet offers many services such as e-mail, social networking, online games and VOIP (Voice Over Internet Protocol) such as Skype, messengers, etc.. The internet is also used to advertise or start small businesses by buying a domain name and starting from there (such as Yahoo! Small Business which costs about \$10 to begin) or to shop for goods such as Amazon or to sell goods through auction sites such as eBay. The internet is a place for leisure, communication, information gathering, sharing, etc.

Over time, the internet has evolved tremendously in terms of the speed and the reliability of the internet. For example in the late 90's people were using dial-up to use the internet and was very slow to receive and transmit information while also having to connect to the internet service provider each time when people wanted to use the internet. Then a couple years later, broadband was introduced and the internet was faster than before and instead of paying huge sums of money in dial-up(as the amount of time being used for the internet factored in the internet bill) people can now buy a package with the specific speed without having to pay extra money as was the case in dial-up. Also now it has evolved even further with wireless networks. This is very convenient because people can bring their laptops in the train or at the airport and surf the web.

People can also use the internet in other ways besides the computer. For example, cell-phones and BlackBerry have built-in internet capabilities. So communication has evolved tremendously through the development of the internet.

Although the internet is a lot more useful and affects our everyday lifes, there have been drawbacks of the internet as well. Viruses, annoying pop-ups, phishers, spammers and hackers are some of the negative impacts of the internet that has evolved in significant ways and at times scary ways with all the ever-increasing identity-theft news among major companies and corporations.

The intranet is different from the Internet. It is like a private internet, confined to an organization, etc. For example, our school has a Intranet as well as a Internet.

### Many advantages include:

### Advantages

1. Workforce productivity: Intranets can help employees to quickly find and view information and applications relevant to their roles and responsibilities. Via a simple-to-use web browser interface, users can access data held in any database the organization wants to make available, anytime and - subject to security provisions - from anywhere, increasing employees' ability to perform their jobs faster, more accurately, and with confidence that they have the right information.

2. Time: With intranets, organizations can make more information available to employees on a "pull" basis (ie: employees can link to relevant information at a time which suits them) rather than being deluged indiscriminately by emails.

3. Communication: Intranets can serve as powerful tools for communication within an organization, vertically and horizontally.

4. Web publishing allows 'cumbersome' corporate knowledge to be maintained and easily accessed throughout the company using hypermedia and Web technologies. Examples include: employee manuals, benefits documents, company policies, business standards, newsfeeds, and even training, can be accessed using common Internet standards (Acrobat files, Flash files, CGI applications). Because each business unit can update the online copy of a document, the most recent version is always available to employees using the intranet.

5. Business operations and management: Intranets are also being used as a platform for developing and deploying applications to support business operations and decisions across the internetworked enterprise.

Source: Wikipedia.org

This concludes my topic.

Also, another good resource from http://www.useit.com/alertbox/9709b.html follows:

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The Difference Between Intranet and Internet Design

Your intranet and your public website on the open Internet are two different information spaces and should have two different user interface designs. It is tempting to try to save design resources by reusing a single design, but it is a bad idea to do so because the two types of site differ along several dimensions:

• Users differ. Intranet users are your own employees who know a lot about the company, its organizational structure, and special terminology and circumstances. Your Internet site is used by customers who will know much less about your company and also care less about it.

• The tasks differ. The intranet is used for everyday work inside the company, including some quite complex applications; the Internet site is mainly used to find out information about your products.

• The type of information differs. The intranet will have many draft reports, project progress reports, human resource information, and other detailed information, whereas the Internet site will have marketing information and customer support information.

• The amount of information differs. Typically, an intranet has between ten and a hundred times as many pages as the same company's public website. The difference is due to the extensive amount of work-in-progress that is documented on the intranet and the fact that many projects and departments never publish anything publicly even though they have many internal documents.

• Bandwidth and cross-platform needs differ. Intranets often run between a hundred and a thousand times faster than most Internet users' Web access which is stuck at low-band or mid-band, so it is feasible to use rich graphics and even multimedia and other advanced content on intranet pages. Also, it is sometimes possible to control what computers and software versions are supported on an intranet, meaning that designs need to be less cross-platform compatible (again allowing for more advanced page content).

# T136 - Encryption methods by Romeo Wu

Traditionally, several methods can be used to encrypt data streams, all of which can easily be implemented through software, but not so easily decrypted when either the original or its encrypted data stream are unavailable. (When both source and encrypted data are available, code-breaking becomes much simpler, though it is not necessarily easy).

The best encryption methods have little effect on system performance, and may contain other benefits (such as data compression) built in. The well-known 'PKZIP®' utility offers both compression AND data encryption in this manner. Also DBMS packages have often included some kind of encryption scheme so that a standard 'file copy' cannot be used to read sensitive information that might otherwise require some kind of password to access. They also need 'high performance' methods to encode and decode the data.

Fortunately, the simplest of all of the methods, the 'translation table', meets this need very well. Each 'chunk' of data (usually 1 byte) is used as an offset within a 'translation table', and the resulting 'translated' value from within the table is then written into the output stream. The encryption and decryption programs would each use a table that translates to and from the encrypted data. In fact, the 80x86 CPU's even have an instruction 'XLAT' that lends itself to this purpose at the hardware level.

While this method is very simple and fast, the down side is that once the translation table is known, the code is broken. Further, such a method is relatively straightforward for code breakers to decipher - such code methods have been used for years, even before the advent of the computer. Still, for general "unreadability" of encoded data, without adverse effects on performance, the 'translation table' method lends itself well.

A cyclic redundancy check is one typically used checksum method. It uses bit rotation and an XOR mask to generate a 16-bit or 32-bit value for a data stream, such that one missing bit or 2 interchanged bits are more or less guaranteed to cause a 'checksum error'. This method has been used for file transfers for a long time, such as with XMODEM-CRC. The method is somewhat well documented, and standard. But, a deviation from the standard CRC method might be useful for the purpose of detecting a problem in an encrypted data stream, or within a program file that checks itself for viruses.

# T137 - The limiting effect of bandwidth by Tommy

Although internet connections are able to pass a lot of information back and forth, they are not all powerful. Every internet connection is restricted by its bandwidth limit. Bandwidth is the transmission capacity of a communications device, or the amount of data that can be passed along a communications channel in a given period of time.

The main issue associated with this subject is how limiting it is. Applications that communicate a lot with several different computers at once can put a great strain on the computer that they are running on. For example, torrent programs set up connections and download files from many other computers. Quite often, this uses up a lot of bandwidth on the host computer and the person using the torrent program will experience a significant drop in connection speed when using other applications, such as internet explorer.

Extremely popular websites or files that receive a large number of "hits" per day from users around the world may cause server crashes or certain images not to be displayed. People surfing a website that is being browed by

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many other people may experience slow loading times or sometimes no response at all. Images hosted on image hosts such as Photobucket may not display if too many people view them. Instead, a message saying "Image not displayed due to exceeded bandwidth" is posted.

The ethical issues here are people who deliberately upload large amounts of data in a very short period of time to certain websites. This causes those websites to exceed their bandwidth and become inaccessible to other people. This is especially the case for websites that do not host themselves. Instead, they rely on other hosts such as Geocities or Bravenet. These hosts often put a limit on the amount of bandwidth that sites are able to use. When a site exceeds its allowed bandwidth, it is taken down temporarily.

The problem of programs hogging bandwidth on internet connections can be solved by setting limits to how much bandwidth certain programs are allowed to use, or by simply running those programs at times when nobody else is using them. The problem with setting a limit on bandwidth is that torrent programs may experience slower download rates.

For popular sites that experience server crashes due to too many people trying to access them at once, multiple servers can be set up to help ease the load on individual servers. The file sizes on these sites can also be reduced so that not as much bandwidth will be used when people load a page.

People who deliberately upload large amounts of data for the purpose of crashing a site can be stopped or at least hindered by placing a limit on the amount that can be uploaded at once. Also, the security for many web hosts or servers could be increased so that hackers would have a harder time breaking in and uploading things to exceed the bandwidth. The problem with this is that it would stop people who upload large files for legitimate purposes.

Because resources are limited, the problem of limited bandwidth will always exist. It cannot be extinguished even if connections are upgraded to be able to transfer more data faster, because the data size will also increase to keep up with the faster transfer rates.

### Email by Joseph Toyoshima

With just one click of the mouse, a message can be sent instantly to anyone, anywhere with an Internet. In addition to that, e-mail is completely free. E-mail has many convenient uses but there are also lots of setbacks.

### How it works

Email is not as simple as the three-step process we use every time we send an email: type the content, select an address, and send. It also includes going through simple mail transfer protocol, which sends it to the local mail transfer agent (MTA), which looks for the emailing service that accepts the username, and finally sends the message to Bob. Though there are many steps in this process, it can be done in a matter of seconds due to the efficiency of technology.

## Extras

Most email services do not only come with an address book, an inbox, and a message sender. They provide uses such as chat, news updates, starred messages, a calendar, photos, and many more. You can also send attachments from certain documents through email. One of the many popular uses of email is chat. By using this you can send back and forth messages instantly to the people in the same chat room. Unlike email when your chatting, you use a chat box in which your conversation goes through.

Each time you type a message and send it, the person you sent it to would receive it instantly into their chat box. Basically it's like talking face to face except your looking at the computer screen. Most services limit their chat to only within others using that service (people using gmail cannot chat with people using hotmail with the gmail account). Otherwise, if the services are the same people can talk to each other around the world at no price except for the Internet and electricity bill.

There also is webcam, where your receiver can view your simultaneous movements perceived by the camera. Another great use of email is sending attachments in which you can basically send any type of file. For example, you're working with a partner on Microsoft PowerPoint. Even though both of you are at your houses, one can work on PowerPoint and send it to the other, who can also improve on it, and so on. No printer? You can send your work as an attachment to yourself and print elsewhere. Email does not only provide an easier and quicker mailing service but also includes many other useful uses.

#### Negatives

Most of us already know about the positive, convenient uses of emailing and we tend to ignore or forget the negatives. By doing so our hard work can be destroyed in a flash. These include file corruption and privacy problems. The most common, in which almost anyone can do is spamming. This is the process where a spammer can send millions of emails and by doing so freezing or lagging (computer becomes extremely slow) the computer, disabling the use of the account. Email services solved the problem by adding a "spam" option along the other message options such as open or delete.

If you click the spam option, all messages from the sender would be removed into a spam folder and blocks the sender. This helps but it is not good to rely completely on it. Another is an email virus, where an infected email would put a virus into your computer when opening it. The best way to avoid this is by not opening any unknown

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senders. But sometimes when someone emails another, without the knowledge that there is a virus, the virus is spread to the person who opens it.

Also many times people expect an email from someone they do not know and can open the virus. From just spamming and viruses, the precious time you spent on a work could be deleted and never found again. This is why it is very important to save your work not only on your computer but also to a CD or those memory stick things. For these reasons you also should not depend completely on attachment from your email. The privacy problem is a big one because basically every single of your messages can be somehow read either by the government or a hacker. A hacker can get the password to your account or can intercept messages that are sent. This is why you should not write anything exceptionally private or top-secret using email.

## Conclusion

Knowing the pros and cons of email we have to wisely use the email in a certain way, not becoming over dependant but also not ignoring the wonderful services it can provide. We need to prevent ourselves from getting too private in our discussions and always having a backup for files. By doing so we can avoid the negatives and enjoy the positive concepts of email.

# T139 - Viruses by Isaku

Viruses have become more of a threat to internet users as a result of the advance in network technology. Viruses were considered minor issues at first, when the internet was first introduced. This was due to the lack of opportunities for computers to pick up the viruses off the internet. After all the internet's functions were extremely limited at first, and so was the functions of the viruses. However, the wide range of usage by us and the increase in variety of software on the net has drastically increased our PCs' vulnerability to viruses. Some might be surprised by the familiar software and internet services that cause our PCs to become easy targets for viruses.

The first method in which viruses get into our PCs is email. Due to its convenient and fee less system, email has become a communication method used by most of the people who have internet connections. This well known system however, is an easy opportunity for viruses to enter our computers. Trojans, the primary method for viruses transport is a program which can open a persons email account from the inside. Like its name suggests, Trojans are sent into the persons account disguised as a normal message. When the person opens the message, the Trojan is programmed to defunct the security system somehow and make it vulnerable to intrusion.

Another commonly known virus is spyware. Spyware is a information sharing program usually preinstalled in our PCs. It is possible to misuse this program, one common method being to track the history of the types in a keyboard, and obtaining a PC user's password and other important personal information. The last, but the most dangerous is viruses that we unintentionally obtain through the internet. This is the most dangerous of the programs because some of these are powerful enough to crash our PCs.

It is also the most precise method in getting viruses into the PCs due to our habits when surfing the internet. These habits are our tendency to seek for free content. The internet gave us infinite opportunities to gain stuff for free that we would normally have to pay for in our daily life. Such things include music, movies etc. which we download through methods such as P2P shareware. What we don't know is that these files sometimes include viruses. Once we download these virus infested files, our computer becomes infected, and eventually destroyed internally.

How must we counter these harmful viruses? The easiest way would be to use anti virus programs which check files and block virus infested programs and sites. We must be careful with the choice of these programs however, as the free anti virus programs are often reported to be viruses themselves. Careful attitude will help enhance our experience on the internet.

# T140 - Features of a web page by Taro Kondo

Not all the web pages on the Internet are identical, due to the fact that there are different text editors for each of those. However the basic format is the same for all the web pages, because the core elements are essential for a web page to exist. According to Wikipedia, a web page is an 'information set', and so it has 'many kinds of information, which is able to be seen, heard or interact by the end user'. The type of information is categorized as either 'rendered' or 'hidden'. More common titles for the two groups are 'perceived' and 'internal'.

Within each groups, the information is furthur classified. So they have distinct characters. First focusing on perceived information, these branch out into what are called, textual, non-textual, and interactive information. Textual, obviously is typed words that may appear in variations, meaning in different color, size, and font. Non-textual on the other hand, would be things like images. Still images come in many forms too, such as GIF, JPEG and PNG.

Moving, or animated images normally are Flash, Shockwave or Java applet. These are all multimedia program which is a tool for enabling certain parts to function. In addition to images, non-textual includes audio, usually MIDI or WAV format. Interactive information, compared with the the previous two features, is rather unique although it is seen on the page also. One kind of interactive information would be hyperlink, which is a guidance for moving from one document to another. Often this is in blue, if not in a different color from the rest of the text, so that the person viewing the page can notice it.

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There may be interactive illustrations, which is another example of interactive information, because the viewer can 'do' something with it, to certain extent. What is meant here is that they can activate or stop things like games and 'click to play' flash any time they wish. Taking this in account, buttons are also interactive.

Summing up, lack of any of the above features on the page would make it a very dull page and therefore it is important not to disregard the various items when constructing one. In contrast with perceived information, internal information does not appear directly on the page, but is hidden and it plays great role for making 'outside' details to come to where they belong and work properly. In another word, internal information has the ability to manipulate perceived information.

It must be noted that because of this, only the page editor can view and control the full content of internal information. The viewers can sometimes have access to it partially, though. By going to 'view' on the toolbar, then clicking 'source', it is possible to look at the Javascript, programming language that gives numerous instructions. Some of them might be to do with changing the size of images specifically. Other internal information that can be found in the Javascript would be 'comments'.

Comments are written in some occasions by the editors for reminders. If they work on the construction of their sites for a while and take a rest, before doing so they might want to write down whatever they had in mind, so that when they get back to restart, they can refer to those. In this way, efficiency goes up. As stated in the very beginning, not all the web pages are identical. The reason behind this could be that although the types of the features are the same, the editors use them uniquely, thus making their site more attractive.

# T141 - Global databases by Ken

The term or expression database originated within the computer industry. A database is a structured collection of records or data which is stored in a computer so that a program can consult it to answer questions. The records retrieved in answer to the questions become information that can be used to make decisions. There are a number of different ways of organizing a schema, that is, of modelling the database structure: these are known as database models. A schema is a structural description of the type of facts that are held in the database. There are many different kinds of data base models.

The flat model consists of a single, two-dimensional array of data elements, where all members of a given column have similar values, and all members of a row are related. For instance, names and passwords might use a flat model. Each row would have the specific password associated with an individual user. The columns of the table have a type associated with them, for example character data, date or time information, integers, or floating point numbers. It is basically like a spread sheet.

A hierarchical model organizes data into a tree-like structure. It implies a single upward link in each record to describe the nesting. It also implies a sort field to keep the records in a particular order in each same-level list. These were widely used in the early mainframe database management systems, like the Information Management System. It now describes the structure of XML documents. This model is very efficient to describe many relationships in the real world, like recipes, table of contents, ordering of paragraphs, or any sorted information.

The network model organizes data using two fundamental constructs, called records and sets. Records contain fields and sets define one-to-many relationships between records. A record may be an owner in any number of sets, and a member in any number of sets.

The operations of the network model can be navigated. A program navigates from one record to another by following the relationships in which the record participates. Records can also be located by supplying key values.

Although it is not an essential feature of the model, network databases generally show the set relationships by means of pointers. They directly address the location of a record on a disk. This gives excellent retrieval performance.

A relational model is a mathematical model defined in terms of predicate logic and set theory. Three key terms are used extensively in relational database models: relations, attributes, and domains. A relation is a table with columns and rows. The named columns of the relation are called attributes, and the domain is the set of values the attributes are allowed to take. The basic data structure of the relational model is the table, where information is represented in columns and rows. Thus, the "relation" in "relational database" refers to the various tables in the database.

The columns enumerate the various data, and a row is an actual instance of the data that is represented by the relation. As a result each table shows different kinds of information that can be related. This database is used the most in the global society.

Databases are preferred for the storage of large multiuser applications, where coordination between many users is needed. Even individual users find them convenient, and many electronic mail programs and personal organizers are based on standard database technology. Advanced databases will help the global society store and retrieve information. This will help communication, which will make every society more involved or dependent on each other.

T142 - Online services, e-commerce	e, banking, health, libraries by Kent

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# **Online Services**

Online services are services provided by the internet. This is a broad term that could refer to simple things like provision of information or anything like trading of stocks over internet. Online services emerged as the internet technology developed. Online services benefit both the service providers and the people who get the service by simply increasing efficiency. Use of the internet will cost both of them less. It is also benefiting because most online services such as Wikipedia are free. Other examples of online services are search engines, online backup services, and e-mails.

## E-commerce

An e-commerce, or electric commerce, is an online service. It is the buying and selling of goods and services on the internet. An example would be Amazon.com. Usually, the marketing, ordering and paying are done over the net and the product is sent to the buyer's house. As a type of an online service, it shares the same benefit introduced above: it increases efficiency. Use of internet is a good way of reducing costs for the sellers. It is also convenient for the buyers to be able to purchase products without getting out their house. This will damage shops as people rely more on online shopping and on the other hand greatly profit the delivery industry.

### Banking

Banking is one area greatly impacted by the informational technology. First of all, the processing of data has become tremendously easier. Since much of the concept of money tends to become a mere data, trade of money can even be done simply by process of data. Technology has enhanced the system of money in many ways. Credit card is an example. There also are several online services on banking which are usually referred as e-banking. It allows bank transactions such as transferring funds or paying the bills to be done on the internet. These technology developed along with the e-commerce allowing payment over net.

### Health

Health is one of the biggest issues that is comprised by the development of technologies. Ergonomics which is the study of interactions of humans and technological systems tries to improve this matter. Some examples of health sacrificed for the convenience of the technologies could be eye sights that are lost by diseases like glaucoma caused by reading on the computer screen for too long. Electromagnetic radiations emitted by our now familiar tools such as cell phones causes severe problems to the health but people only know about it vaguely and are never serious about it.

Many of these health issues are not quick and apparent, but do have major impacts to the human bodies in long term. People have to have a more concrete knowledge about the dangers of the useful technologies and the education should involve more of these issues. There should not be a major problem if people's serious attentions and ergonomics develop along with the technology.

# Libraries

Libraries are another thing impacted by the informational technological development. As the value of books has decreased due to the informational technology as the internet allowing free, wider and easier information, the use of libraries has decreased as well. In time, books will definitely be an old and inefficient way of storing data. Many libraries may be in a danger of closing in the next few years. Libraries have adjusted to the situation by adopting computers. There is a term called digital library which refers to two types.

One of it is a physical library which a significant amount of data is stored on digital media. The other definition is a library that is almost completely digital which would be accessible on the internet which may simply called data archive. Since libraries are not simply a place full of books but is a place full of information, it would be changing its forms adjusting to the technological development.

# T143 - Use of appropriate search engines by Dwarkesh

In this international world of global information, the Internet and especially a search engine is what drives a person everyday. It helps a person develop and create his information with the ease of a "search" button on a webpage. This convenience has created dependence for ever-ready information on their fingertips. The problem is as people start taking this convenience for granted; some Search engines such as yahoo and Ask.com take advantage of this market need and therefore don't really do their best to satisfy with their very best quality.

## How to look for search engines according to your need:

Choose a search engine, directory or library in accordance with the kind of search you are doing and the kind of results you are seeking. If you are looking for a Web site, information that might be contained within Usenet; Academic articles that may only be retrievable with gopher; Determine your aims: Do you want a specific hard-to-find document on an esoteric subject, or general information on a broader topic; Do you need to search the entire Web, or is what you are seeking likely to be found on a number of sites, or only the most popular sites? In making your choice, determine whether the information you are looking for is likely to be in a page's title or first paragraph, or buried deeper within the document or site. Use a search engine's advanced features, if available, and read the help files if you are unclear about its searching procedure.

# CHOOSING SEARCH TERMS AND SYNTAX

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Enter synonyms, alternate spellings and alternate forms (e.g. dance, dancing, dances) for your search terms. Enter all the singular or unique terms, which are likely to be included in the document, or site you are seeking. Avoid using very common terms (e.g. Internet, people), which may lead to a preponderance of irrelevant search results.

Determine how your search engine uses capitals and plurals, and enter capitalized or plural forms of your search words if appropriate. Use a phrase or proper name if possible to narrow your search and therefore retrieve more relevant results (unless you want a large number of results). Use multiple operators if a search engine allows you to do so. If you receive too many results, refine and improve your search. Pay attention to proper spacing and punctuation in your search syntax.

Until now Google is the best Search Engine there is as it is meeting the market needs in the best possible way. Yahoo and Microsoft are making their best effort to compete Google, nothing but that. They do not provide users with good relevant search results to increase their information.

### Use of appropriate search engines by Aditya

Search engines are an easy way for a person who is attempting to navigate the internet to do so with a significant level of ease. An appropriate search engine is one which uses relatively advanced technology to search pages and return results based on a customer's input. The customer is not necessarily paying.

There are a few search engines apart from Google. Go to Wikipedia and type in search engines in the search box for this information. One such search engine which uses advanced technology related to ranking pages is AskJeeves.

The issues are those related to ease of use for the customer and brand loyalty.

Google has gone to extra lengths to do this with its PageRank Technology. This technology emerged when the Google guys met at Stanford. They eventually decided that they'd follow their own path. Eventually, they found investors who had faith in themlt returns results based on the number of times previous users have gone to the site and also according to the number of times or usefulness that Google considers it to have.

The stakeholders in this case are both Google and the customers of Google's various products such as Google Sketchup Pro and Google Earth. People will begin to gain faith in the Google brand and purchase more of their products. The customers save lots of time and hence find the efficient solution to navigating the Internet.

The disadvantage for Google is that it can lose its loyalty very easily if it rolls out even one bad product. This is a very high risk business and basically only has to do with Google's or a search engine's business situation. The impact is basically global because the Internet is accessible in any area of the world.