### T144 - The psychological consequences of people being in permanent contact by Romeo Wu

Busness men are often suffers from the psychological consequences because they are being in permanent contact, either by their company or their clients. For example according from one article of from Japan Times, one sells man committed suicide because he was so much annoyed by his cell phone since his clients call him almost 24/7 which took away his free time with his family and eventaully took away his life.

When you are being in permanent contact you most likely will loose most of your free time and the people who is calling you does not care where you are or what you are doing they will want ur response immediately. There was this incident that this one computer engineer who were attending the wedding for his son but then he received a phone call from his company which want him back to the main company as soon as possible, which the main company located in France and the person is now in Japan, and after he flew 3000 miles to France he figured out the problem is so minor that he can fix it in matter of 30min, and the person ended up abandont his son's wedding also wasted huge amount of his life time.

When I was young I once asked my dad why dosnt he have a cell phone and why wouldn't he use it when his company offered him a free one. Now I finally understood how much psychological suffering you will get when you are being in permanent contact.

### T145 - Ethical considerations of control as the result of using communications technologies by Harsh

The topic makes us think of invasion of privacy, which is related with today's technology. The phrase "communication technology" refers to phone, e-mail, fax etc. "Control" refers to a certain organization or person controlling the use of this technology. It also refers to invasion of privacy which arises from the abuse of "communication technology."

First of all, let's define "ethics". Ethics is defined as "moral values that govern a person's behavior." So in this case, we are dealing with moral values that are related with invasion of privacy through the use of phone and email. One thing is for sure that invasion of privacy without the other person's approval is a serious offence and hence should not be done. Yet people still do it and try their best to find out what's going on in other person's life.

In case of e-mail, there are thousands of hackers who try to figure out the passwords to people's e-mail every second! And then there's the people who pay these hackers to figure out the passwords. Why would people pay? Because they can't do it themselves and they really need to find out if their girfriend is cheating on them or not. There is no doubt that having access to someone's email account can reveal a great amount of information about that person! Therefore, jealous husbands and wives try to gain access to their partners' e-mail accounts! Is that ethical? Of course not! That is invasion of privacy and I am sure there's some kind of law against it in the USA.

However, things are a little different when it comes to phone. There are other ways people "try to control" other person's life through phone. The most popular one (especially in India) is just listening through the base speakerphone if the other person is talking on a cordless phone! My mom's done it quite a few times, and has gained quite a lot of valuable information related to what I do at school. Then you can mess with the cables and connect it with yours and hear what the other person's talking. And you can always somehow get a conference call going and while one party knows you are there, the other party doesn't and he/she keeps talking without knowing that you are hearing everything! Just like e-mail, this kind of behavior is NOT RIGHT!

You cannot invade someone else's privacy, at any cost. If it is absolutely necessary then at least let the person know before you do it. Or be able to answer questions in the court of law! Invasion of privacy is a serious offence and should not be taken lightly. Not only is it ethically wrong, it can also cause a lot of harm to the other party.

#### Ethical considerations of control as the result of using communications technologies by Isaku

With the progress in information technology over the last fifty years, the methods of communication have drastically increased. This indeed marks an important stage, not only in technology, but also in evolution of mankind. The emerge of a new communication method always accompanies an important development in the specie of man. The first was hand gesture. Communication of hand gesture was inevitably created by primates as they shifted from a solitary to a group cooperative life style.

The next was speech. Speech was a need by the primates who had by then conformed with the co operational life style that they adopted. Therefore there was a need for a communication system which could transfer more sophisticated and complicated ideas than body language. Thus this marked an important turning point in evolution, as it separated mankind from all other animals showing an intellectual progress.

Next came writing. Writing was needed as a method to preserve man's ideas, enabling further progress by passing on established knowledge to the future. Many centuries later, the telegram was invented, allowing fast long distant communications. Although the telegram was not a direct reason for human development, it came out almost at the same time as one of the most important incidents in human development, which was the industrial revolution. Next came the telephone/radio communication.

This was a dramatic progress in technology, one that is comparable to the aircraft, as it connected people from distant countries together. It also gave some people a new identity as residents of earth, rather than residents of one's country. After that, we were introduced the most convenient and useful method of all; email.

Email was a result in the increased sophistication of the internet, which was therefore allowed a variety of functions. Email carried the pros of the previous communication methods, including the long range communication of the telegram, the saving function of writing. Such a convenient form of communication symbolized the IT revolution, which is still in progress today.

As stated above, communication methods hold an important role in terms of daily life and the progress of mankind. And because communication holds such importance, it is a remorseful fact that some organizations have begun to use our communication to force control over us. This is evident from the frequent use of wiretapping by not only criminal purpose, but with legal authorization by the government.

Although the use of wiretapping has been somewhat restricted in respect to privacy, the government was able to gain the ability to monitor our conversations using the excuse of countering terrorists/criminals. If misused, wiretapping can become a fearful tool which can easily rob us of our privacy, and hurl us into the hands of an authoritarian police state. Here comes the question of morality.

Up to what point can the government use wiretapping with out invading human rights? What is the border line between peace keeping and control? As this is a question with ambiguous answers and can be interpreted in many ways, we can not simply keep the government from using wiretapping against us. What we can do is keep cautious measures when using long distance communication.

Avoid mentioning valuable information that can be used against you on long distance communication tools, even if you are talking to a person close to you. As petty individuals, we alone do not hold the power of keeping the government from abusing their power. It is only when we as a whole clearly convey our position, and oppose to these inhumane acts then we make a difference.

#### T146 - Social impact on health of the use of mobile devices by HeeJun Sun

Everyday people use thier mobile devices. Mobile devices are the machines that can be carried around. Mobile phones, laptops and PDAs are common examples. As time goes, many people prefer using such mobile devices. Especially the population that carry a cell phone is increasing rapidly. The major reason why people like mobile devices is that it is "mobile"- they can bring the device anywhere without any restriction.

As people started to inquire whether using mobile devices harms the health of the people, there have been many researches and some are being done at the moment when you are reading this essay on your laptop or computer. Despite a lot of researches, researchers differ in their opinions. Some claim mobile devices harm users' health and others do not. Who is right and who is wrong? Let's consider mobile phones as an example because most people hear news about the relationship between health and use of cell phone quite often. In fact scientists and doctors have done a vast amount of research about the impact of the use of mobile phones on health. To know if mobile phones affect our health first we have to know how it works.

Like all other radio communication devices, mobile phones use radio waves that travel with the speed of light to carry the information, like voice, text and images, through the air. Radio waves are a kind of electromagnetic fields that are present in our every day life, both naturally and from man-made sources. Different types of electromagnetic fields have different frequencies. Visible light, for instance, has higher frequencies than radio waves, but lower than ultraviolet light. Electromagnetic waves with frequencies higher than ultraviolet light are called ionizing radiation, which has sufficient energy to break molecular bonds and damage human tissue. X-rays and gamma rays are examples of ionizing radiation. Radio waves belong to the lower frequency part of the electromagnetic spectrum, which is called non-ionizing radiation. In the lower frequency part the electromagnetic energy is too weak to break molecular bonds.

What happens when a person uses a mobile phone? When a person is exposed to the radio waves from mobile phones, most of the energy will be reflected by the body or travel around it. Some of the energy, however, will be absorbed in the tissues at the surface of the body. Inside the body certain molecules, like water, will start to vibrate due to the electromagnetic fields. By "friction" the energy is converted into heat. If the radio wave intensity is very high, the heating may be significant and harmful. But, as I have mentioned earlier, the power( radio waves that belong to the lower frequency part) used by mobile phones is very low so the tissue heating due to radio wave is too small to be noticed. However, mobile users sometimes feel quite noticible heat after a long phone call. This is not caused by radio wave heating but by the phone itself getting warm during a call.

Some sensitive medical equipment, including cardiac pacemakers, may get affected by electromagnetic fields. However, such devices in recent days have improved so much that the risk that a mobile phone may have an impact on them is very small. Although having better condition of the device, pacemaker users are recommended to keep a distance of 15 cm between their mobile phone and the pacemaker to avoid the risk of electromagnetic interference.

As we can see the use of mobile devices does not have a harmful impact on our health. In fact, WHO and other expert groups have concluded that the scientific evidence does not demonstrate any health effects associated with the radio waves from mobile devices such as mobile phones. Therefore, we do not have to worry too much about using cell phones or labtop.

### T147 - Effect on personal productivity of personal communications devices by Kent

Numerous new personal communications devices have developed along with the internet. These personal communication devices includes wireless communication through telecommunication network such has mobile phones. The personal communications devices have affected personal productivity a lot.

First of all, the benefit those personal communications devices grant to a single worker is that they are able to easily ask for help to their boss or other skilled individuals. Since wireless communication through telecommunication network is disregard of location of people, it adds certain efficiency to their work. Also, it enhances team works and makes their work smoother. Unlike in the past where the only chance of people to have an assembly to have a talk about certain project was to physically meet each other in a room, now it is possible and easier to gather up on chatting or to conduct a teleconference, conference done through phones. It is also easier for members to talk about new ideas or changes when needed to each other and let others know what they need to know with advanced personal communications devices. The efficiency in communication increases the productivity of a team project and therefore personal productivities of the members.

We could also look at more specific cases in order to see the other effects of personal communication devices on personal productivity. For example, for some people who have to talk to the people of other companies, the personal communication devices can enhance their productivity. They can use those personal communication devices to make an appointment any time or ask if the person he or she needs is currently available just before they would go see that person. It would also work for people like salesman who knows who they are selling their product to (such as other companies, not just any houses or people). This would save their time to go see the person they want and find that the person is not there or available at the time.

Though the personal communication devices have generally increased personal productivity as explained above, the development in those personal communication devices have also aspects that affects personal productivity in a bad way. By the new personal communication devices of this modern time such as mobile phones, it is almost always possible to contact anyone one would want to talk to anytime they want regardless of where the contactor and the contacted are. However, in contrast, this means that you could be contacted by some one else any time they want to. Too much phones ringing or too many mails that are not necessary could disturb people's concentration especially if those come in the middle of their work or when they are having a rest.

You would not want to be concentrating on your task and suddenly phone rings and you have to talk about other business with other company's man. Also, since anyone could send you a mail, you could be having too many junk mails and your inbox may be full of junks and you may lose your important data if you are not managing your data wisely. Thus, behind the convenience of the developed personal communication devices have the potential to decrease the personal productivity by too much communication that are unnecessary or not in the right time.

In conclusion, the personal communication devices have a positive effect on personal productivity by granting them more efficiency in communicating to other people. Though the fact that anyone could contact you anytime anywhere may disturb some people, the personal communication devices should have a positive effect on personal productivity overall.

### T148 - Effect on the environment of personal communications devices by XiaoXiao Li

First of all, what is a "personal communication device?" It is basically a fancy way of describing cell phones, pagers, wireless devices. Basically anything that can be used to communicate with your friends or family. A recent article, which I wrote, in the school newspaper raised the issue of cell phones effecting sperm.

A recent article banned the use of personal communication devices in the Johns Hopkins Hospital because they "undermine the integrity of an individual(s) rights to privacy, affect the quality of our patient care, and interfere with the efficient operation of the hospital." Since it has been proved that personal communication devices do indeed distract the person, it is not right for the doctors to have these devices turned on while operating on someone with a severe disease.

Use of mobile phones has also been banned in Japan while driving. Most people have started using the earphones so that the police can't see it. Perhaps, the use of earphones decreases the rate of accidents because both of your hands are on the steering wheel. However, the best solution of course is to stop the use of personal communication devices entirely. Because even if you are not using your hands to hold the device, your mind is still being distracted.

The effects listed above are on the personal lives of people. They can also have an effect on the other people if the person using the device, while driving, crashes into some other car and causes injuries to some other person. Distraction happens to myself sometimes – crossing the streets while talking on phone and not thinking whether the light has turned or not.

Those are the effects on a simple level. We all know or have at least heard about the radiation from cell phones. Now what exactly is this radiation stuff we hear about all the time? Basically cell phones have to emit signals via radio waves, which are composed of radio-frequency energy, which is a form of radio magnetic radiation. You shouldn't use it too much because it might damage the tissue inside your head. The debate on this topic is still

going on and perhaps we'll never reach a sure conclusion. But what can be said is that excessive use of cell phones is not good.

Along with that, studies have shown that electronic waste (also referred to as e-waste) from personal communication devices like cell phones, PDA's and digital cameras contains toxins that are damaging to our environment. The e-waste is basically composed of things like lead and mercury and beryllium which are which are greatly found in circuit boards of these devices. Therefore, not only do these devices damage our sperm and tissues in the head but they also harm the environment.

#### T149 - Social effects of telecommuting by Simon

Telecommuting is the practice of working from one's home, or at a satellite location near one's home, where employees use communication and computer technology to interface with internal and external stakeholders. Most reports on telecommuting suggest that this alternative has been positively received by both employees and manager. Employees view telecommuting as a way to maintain better balance of the demands of work and family, and managers regard it as an opportunity to gain a number of benefits for their own commodities.

The definition of telecommuting is described as "is working, in which, the work, the location of which is independent of the employer or contractor and can be changed according to the wishes of the individual teleworker and/or the organization for which he or she is working. It is work which relies primarily or to a large extent on the use of electronic equipment, the results of which are communicated remotely to the employer or contractor. The remote communications line need not be a direct telecommunications link but could include the use of mail or courier services."

Telecommuting is significant in the nature of the working atmosphere of which advanced technology are used frequently, often computers. Our society is moving away from a manufacturing and industrial focus and becoming an information-driven machine. Jobs based on information are obviously more suited for telecommuting than manufacturing based positions, where the materials cannot be easily transported. However, this is not simply an effect predicted to occur at some point in the future. As of 1998, approximately 7.6 million Americans are full time telecommuters and sixty two percent of all American companies offer some type of telecommuting program.

Despite cultural gender stereotypes surrounding gender and technology, the overwhelming majority of telecommuters are in fact women. Most social scientists suspect that it is related to North American gender role which demands that women must care for the children in a family. In fact, a 1995 study by Telecommute American showed that roughly 75% of American teleworkers claimed that they chose to telecommute in order to "balance work and family life".

Although this claim does not link telecommuting to caring for children, but it is definitely suggestive of the trend. Furthermore, most of the data gathered from companies about their teleworkers indicate a definite gender difference in reasons cited for telecommuting. While most men often indicate that they telecommute in order to save money and have less direct supervision, women, who constitute the vast majority of teleworkers, almost invariably cite family considerations. In terms of worker class, studies show that telecommuting is an almost classless phenomena, with telecommuters ranging from low level clerks to highly paid executives.

This broad range of telecommuters is indicative of its widespread use and importance. It is not simply a new work style which affects a small, elite percentage of the population, but rather a fundamental shift in how all work is being done as a whole.

The advantages of telecommuting vary from different perspectives. From the corporate perspective, worker productivity is increases significantly. Many statistics are available to support this claim. One of the most studied and publicized telecommuting experiments occurred at a company known as Antelope Valley Health Net. Their statistics show that productivity is 15 percent higher for telecommuters than for non-telecommuters. Another benefit is that corporate real estate costs are cut dramatically. Studies have shown that companies that have instituted telecommuting programs have had real estate costs cut by anywhere between 25% and 90%.

Worker perspective claims that telecommuting increases free time by eliminating transportation time and allowing them to schedule their day to maximize performance They also claim that telecommuting allows those who cannot work in the traditional workplace to have jobs. For example, the disabled, who would have a difficult time getting to and working in the traditional office, can work productively at home. Also, it allows workers to spend more time with their families.

From society's perspective, telecommuting is ecological. It Can: clean up air pollution, ease the load on transportation systems, and lower our dependence on foreign oil imports. This is due to the fact that telecommuting reduces the demand for transportation, and therefore the cost of transportation, which is mainly oil, will be less consumed. This would significantly reduce traffic problems, reduce our oil consumption, and improve our environment.

There are few known disadvantages to the corporation from telecommuting. One is that there are few possibilities for career advancement. Some workers don't feel that their possibility for promotion or career advancement had increased due to telecommuting. In fact, many reported that their decision to commute was "career suicide", as without face to face contact with their managers, they were unlikely to be chosen for promotions or assigned to their top choices for projects. Another problem is social isolation. Telecommuting separates each individual worker from the team of employees found at the office. This undoubtedly leads to feelings of isolation, as workers

cannot associate with their colleagues. Although it is difficult to quantify how isolated a worker feels in hard data, it should be fairly obviously that a worker who is telecommuting definitely loses an important part of his social life.

or

#### social effects of telecommuting by Dwarkesh

#### What Is It?

Telecommuting is defined by Webster's New World Dictionary as "using a computer terminal, microcomputer, fax, etc. to perform work in one's home that traditionally has been done in the office." A mid-level employee is defined as anyone above an entry-level position or one rank above entry-level on the corporate hierarchy. A technical position would refer to a position where the job duties, to a significant extent, involve dealing with data or machines, and not human beings.

#### **Reasons for Telecommuting**

One of the most frequently cited motivations for telecommuting by people who wish to telecommute is the opportunity to alleviate some of the hassles that are created by commuting to work on a daily basis. Regardless of where we live or what mode of transportation we use to get to work, it seems that, almost without exception, people find their commute to work to be an extremely annoying aspect of their lives. If we live in a densely populated urban area we frequently have to take overcrowded, uncomfortable, somewhat unreliable, and sometimes dirty buses or trains to get to work. If we live in a less densely populated suburban or rural area we commonly have to drive to work through massive traffic jams over poorly maintained roads and then park in expensive parking lots. Not too many people find either alternative particularly appealing.

The financial aspect of traveling to and from work is frequently regarded as an undesirable part of commuting, and motivates some people to find an alternative to commuting. There are several components to the financial aspect. These include the actual cost of the ticket on the mode of transport (if it is a form of public transportation), the maintenance costs of using one's own vehicle (including tolls, gasoline, and parking fees), the costs of obtaining nourishment while at the place of employment, and the costs of maintaining a suitable wardrobe for one's working environment.

This is a relevant issue because an increasing number of large corporations are offering, or in some cases even requiring, telecommuting for a certain portion of their employee population. The issue is of interest because many of us, as potential employees of these corporations, or maybe as entrepreneurs who will start our own corporations, are insisting that telecommuting be offered as a work option, and every day more of us have the possibility of telecommuting in our future.

#### What is The Issue?

Self-identity is an important concept to this issue because in psychology one's continual sense of self is based on one's personal attributes and the external relationships that one identifies as defining. Hegel located human identity in social activity, concluding that our consciousness of self arises from our interaction with others, and this interaction will at times be competitive, while at other times it will be collaborative. Obviously, when we are going to work, our work environment will influence many of these interactions, and if we are working from home, our interactions with others will be impacted dramatically. The social basis of personal identity is determined by common links of identification within groups. These common links are defined and bolstered by making contrasts with those who are perceived to be of a different group. If one is not a member of any work group because one is working from home, where are these common links going to come from? They will have to come from someplace other than one's work situation. Erickson said that confusion between social and professional roles may cause an identity crisis. My own opinion is that one's self-identity is, to a large extent, determined by the things in life that one is passionate about.

As long as people are living in one place and working in another, it is difficult to be optimistic about the possibility of commuting being made less onerous anytime in the foreseeable future. Much time and money has been spent in recent years to promote alternatives, such as car-pooling or public transportation, to driving alone to work. In some cases, employers have been required to implement programs to reduce the number of trips that their employees make in order to get to work. For example, Southern California employers were required by Regulation XV (1990) and its successor regulations to implement trip reduction programs for their employees, but drive-alone, carpool, and mass transit rates have remained remarkably constant throughout the period of the regulation and thereafter.

The only way to substantially increase the percentage of trips made on public transit would be to make the use of automotive vehicles far less convenient or far more costly — such as by quadrupling the cost of gasoline or placing heavy taxes on automobiles ... But these steps will be so strongly opposed by a majority of Americans that there is absolutely zero chance that they will happen. The most important thing to understand about traffic congestion is that it is a problem that cannot be solved. There is no remedy for traffic congestion because traffic congestion is essentially a balancing mechanism that enables people to pursue six objectives other than minimizing their commuting time. All these problems with commuting and the unlikely possibility of commuting being made less difficult combine to make the idea of telecommuting more and more attractive.

#### T150 - Social effects of the widespread use of tele-conferencing and videoconferencing by Romeo Wu

A videoconference is a set of interactive telecommunication technologies which allow two or more locations to interact via two-way video and audio transmissions simultaneously. It has also been called visual collaboration and is a type of groupware. It differs from videophone in that it is designed to serve a conference rather than individuals.

Now day's people are starting to use more and more video conference as a tool for entertaining, business, or just normal chat. Currently there are people who use video conference as a sexual entertainment who show off there body for money and I personally think it is wrong video conference shouldn't be use like phone sex it is pure disgusting. Even though some people use it for the wrong purpose I still have to admit it is a very useful tool to chat and see your long distance friends.

Simple analog videoconferences could be established as early as the invention of the television. Such videoconferencing systems consisted of two closed-circuit television systems connected via cable. During the first manned space flights, NASA used two radiofrequency links, one in each direction. TV channels routinely use this kind of videoconferencing when reporting from distant locations, for instance. Then mobile links to satellites using special trucks became rather common.

Videoconferencing first demonstrated in could not be used for more mundane applications, such as telemedicine, distance education, business meetings, and so on, particularly in long-distance applications. Attempts at using normal telephony networks to transmit slow-scan video, such as the first systems developed by AT&T, failed mostly due to the poor picture quality and the lack of efficient video compression techniques. The greater 1 MHz bandwidth and 6 MBPS bit rate of Picture phone in the 1970s also did not cause the service to prosper.

It was only in the 1980s that digital telephony transmission networks became possible, such as ISDN, assuring a minimum bit rate for compressed video and audio transmission. The first dedicated systems, such as those manufactured by pioneering VTC firms, like PictureTel, started to appear in the market as ISDN networks were expanding throughout the world. Video teleconference systems throughout the 1990's rapidly evolved from highly expensive proprietary equipment, software and network requirements to standards based technology that is readily available to the general public at a reasonable cost.

Finally, in the 1990s, IP (Internet Protocol) based videoconferencing became possible and more efficient video compression technologies were developed, permitting desktop, or personal computer (PC)-based videoconferencing. In 1992 CU-SeeMe was developed at Cornell by Tim Dorcey et al. VTC arrived to the masses and free services, web plugging and software, such as NetMeeting, MSN Messenger, Yahoo Messenger, Skype and others brought cheap, albeit low-quality, VTC.

# T151 - Social and environmental impact and ethical considerations of telecommuting by Su Chen

Telecommuting is the most widely recognized trip---saving application of telecommunications. Telecommuting usually means office-based employees using telecommunications to work at their homes or at a nearby alternative office for a few days each week instead of commuting a longer distance to work. A successful telecommuting program requires a management style which is based on results and not on close scrutiny of individual employees.

We often say that telecommunications is the most important part of the telecommuting, but what is it? Telecommunication is the transmission of signals over a distance for the purpose of communication. In modern times, this process almost always involves the sending of electromagnetic waves by electronic transmitters.

Today, telecommunication is widespread and devices that assist the process, such as the television, radio, telephone and in term of internet, are common in many parts of the world. It can be efficient and useful for companies as it allows staff and workers to communicate over a large distance, saving significant amounts of travel time and cost. Two or more people may communicate over the Internet using microphones, speakers and video cameras. The audio and video are digitized and sent as a digital message, so it is pretty fast. At the same time the quality of the communication is very good as well.

Today, almost everyone has their personal computer in the home, and of course the internet. Everyday, people spend so much time on the internet, whether to chat with each other or work through the internet. We have to say that internet is in everywhere, it is a big component of our society. Before, people may never think about talking to people over the world by using the internet. But later on we have MSN and Google messengers and some other chat tools which allow people send and receive message immediately. Right now, speakers and web cam even provide us a chance to speak to each other face by face. Technology expands super fast over the world. And now here comes the Telecommuting. Telecommuting first gained more ground in the United States in 1996 as a solution to traffic congestion caused by single-car commuting, and the resulting urban air pollution and petroleum use.

Telecommuting increases the employability of marginalized groups, such as mothers and fathers with small children, the handicapped and people living in remote areas. It can also reduce an individual's car pollution over the time through minimizing daily outside commuting. The set up also offers possibilities for increase service and internationalization, since telecommuters in different time zones can ensure that a company is virtually open for business around the clock. And actually it has provided many advantages.

Telecommuting has actually forced service providers to increase network performance, improve reliability, improve architecture, and improve their strategies. It also allows for travel avoidance that saves on time, traffic jams and etc. More important thing is that telecommuting provides employee flexibility, eases the working parent's burden, increase employee productivity and reduces absenteeism.

A good example for all these can be for single parent family, parent does not need to go to the office instead he or she can just stay at home take care about the kids at the same time. Although it may be a little thing for some one, in fact it really help single parent family in terms of saving time and when they are at working in the home they won't always think about their kids, worry about their safety, etc. These are the social effects of the telecommuting.

However, telecommuting actually does create some problems. Think about you are a member of a team, and your team get involved in a big project and each of or two of you need to work on same thing. Although, by using the telecommuting you two do not need to meet together but can discuss with each other, it sounds pretty cool. In fact, the connection or relationship (trustiness?) between you two may some kind of shake in term of no coffee time and lunch together so on. More problems will come out, you two may get into a divergence which can not solve by using the telecommuting.

At this time, you two need to sit down and talk face by face. But I have to say the benefit of telecommuting is actually greater than the bad influence of it. Don't you think that's why people develop and accept this new way of working? One thing we should really think about is the future of human relationship. So since telecommuting so common and widespread over the world, therefore there is a potential that everyone follow this trend and start to work at home rather than actually go to the office.

I don't know what you think, but what I think is that people with no talk to each other face by face will have a wall between them. Little by little, people may even forget how to actually talk to other since they often do not need to do so. The decline of human relationship is inevitable. And I think this is the one thing we should really think about it.

### T152 - Social impact and ethical considerations of: distance learning, digital entertainment, global media and public information systems. by Chaan

I'll define all the terms listed above and then talk about how they have social and ethical impacts on today's world. First one is distance learning, which is basically learning from distance. Distance learning can be illustrated through many examples. For example, I knew this mom last year that was doing a distance learning course from her home through a college in Minnesota, and then our beloved ITGS teacher last year (Mr. Jamieson) was also doing some kind of distance learning course in education. The social impact of this is actually very positive. Mothers can fulfill their dreams while taking care of their kids at home and many employed people can educate themselves while being attentive to their work. The only ethical dilemma with this can be the problem of "outside help". People will often ask other people to "help them out" with a problem and with your teacher/instructor being thousands of miles away, cheating can be easy. However, since most distant learners are adults they wouldn't take that path, knowing that cheating is bad.

Digital entertainment is basically any sort of entertainment that can be enjoyed through the means of computers, ipods, phones etc, or any kind of electronic devise. The social impact of this is also very positive, but also very negative at the same time. The positive impact is that since all this is available to us we would become couch potatoes. That might be a bit far-fetched but at least nobody gets bored anymore! The negative social impact is that people spend too much time watching movies and tv shows that they forget that a "real" world exists outside. When they realize it, it's often too late, and they have a hard time adapting to the "real" world. The ethical impact is that people often steal or copy digital data in order to save money. I know I have done it and I am sure YOU have done it too. As Steve Jobs says, "Don't steal music."

Global media is basically the worldwide access to news and anything that happens. With the help of the Internet and e-mail, pretty much everything is considered "global" in today's world because it takes less than a minute for news to spread around the globe. Global media can also refer to the video teleconferences that take place around the world in executives' office. The social impact is that people are so used to chatting and video conferencing that meeting a person in real life can be terrifying for some people. It does save a lot of time and money for sure because people don't have to travel across the ocean to meet the company. In case of news and media, everyone is well aware of what's going around them because of constant access. Ethical impact can be that the media can talk about things that are ethically wrong for example rape, sex, violence and drugs and since kids have access to TVs and internet these days, it can be bad for them.

Public information system is basically the information that is available to the public through different means. For instance property records, corporate filings, public records. Bad thing about this is that people can view information about you that you don't want people to know. And good thing is that police can easily track the

criminals down. Ethical consideration is that people might use this for the wrong purpose. For example, a hi-tech criminal might use this information to track the person down and steal his identity!

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### Social impact and ethical considerations of: distance learning, digital entertainment, global media and public information systems. by Chirag

Distance Education is a field of expertise exploring situations in which the learner and the teacher are separated in time, space or both. As Marshall McLuhan stated in his most famous sentence: "the medium is the message", research in distance education consistently proves that the attributes of the medium alter the teaching/learning process. For this reason, distance educators have paid a lot of attention to these attributes. The technologies used to mediate in the teaching/learning situation are classified in four groups: printed, audio, video and electronic, according to the following structure:

- Printed Correspondence education. Books, study guides, texts and other printed materials.
- Audio Broadcast radio, telephone, audiocassettes, audio conference
- Video Broadcast and cable TV, Satellite, Videoconference, Recorded Video (Cassettes, DVDs)
- Electronic Computer mediated communication, mobile learning

These media in turn are sub classified as synchronous (real time) and asynchronous (deferred time), that means that the communication between the student and the facilitator of learning occurs live or in deferred time. Synchronous media are audio conference videoconference, and some forms of satellite combined with phone calls. Asynchronous media are recorded audio, recorded video, radio, TV and some satellite delivery.

A second sub classification refers to one-way or two-way delivery. One way delivery includes radio, TV, one way satellite and pod cast). In this case, the originating site provides all the content and the receiving site is mainly passive. Two-way delivery considers audio conferencing, videoconferencing, chat, video stream. In this case, real time communication is enabled by technology and instructors take advantage of the of background knowledge of the participants to enrich the learning Finally, a third sub classification focuses on human-to-human interaction: one-to-one (such as correspondence); one-to-many (such as radio and TV; and many-to-many (such as computers). With the advance of multimedia. Robotics and artificial intelligence, we may consider expanding this classification to human-machine-interaction, in which avatars and intelligent agents assume part of the responsibility of the instructor which so far it has been demonstrated essential to ensure quality of distance education (Sloan-C Foundation)

Generations of Distance Education (Garrison, 1990)

First Generation

Correspondence education, educational extension, home studies

Second Generation

Teleconferencing- telephone - radio - Audio conference - Educational TV - Satellite - Videoconferencing

Third Generation

Computer Mediated Communication - Online learning - Web Based training - Virtual education - Cyberspace education - Distributed learning - Asynchronous learning - Mobile learning - Serious games - Multimedia - DVDs-Web Based Training.

Socially Distance learning has a very positive impact on the society as it helps people do several activities simultaneously. For example, a student can do a short hand course from an artificial (virtual) University specially created for distance learning through the use of Computers and Internet. That makes it very easy for people to conduct online classes with the help of video/audio conferencing. The ethical impact on the society with this can be that it's very easy to commit fraud with people online by making them pay and cheating with users.

In today's Era digital entertainment has changed everyone's lives dramatically, making entertainment available for us anywhere, anytime and easily possible. With the help of many portable devices such as laptops, portable media players, etc. we can carry entertainment with us anywhere, everywhere it's possible. Therefore socially it has a positive impact on our lives making it easier and more fun. The ethical issues with this can be that people easily break the copyright statements issued by the companies on their media and can become illegal leading to negative consequence.

As the networking technology is developing it is becoming easier for people to stay connected to other parts of the world. Through Global Media we can easily know what's happening in other parts of the world without even having to visit it. It's easier to meet people over the internet as global media makes it possible for us to chat, video conference, audio conference with other people whether it is for business purpose, networking, romance or anything else. But then the ethical issues that rise against digital entertainment are that as the modern generation is becoming more and more sexually exposed to the media, it can cause some ethical problems against inappropriate content being exposed to the public.

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#### Knowledge of technology

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

# T153 - key terms—convergence, teleconferencing, videoconferencing, telecommuting, digital television, push–pull technologies by Ken Moyer

Technological convergence is the modern presence of different types of technology that are used to perform very similar tasks. The term convergence is commonly used in the combination of voice, data, and video onto a single network. These different technologies are now able to share resources and interact with each other to efficiently use all of the technologies together.

For example, there are technological convergence in the media. Playstation 2 is not only a game console, but it is also a DVD player. With your mobile phone, you can make phone calls, take photpgraphs, and download files.

Telecommunication is the transmission of signals over a distance for the purpose of communication. Teleconference is a type of telecommunication. teleconference is the live exchange of information among people and machines that are far apart from one another. They can exchange information because they are linked by a tele-communicating system, usually over the internet.

The telecommunication systems can support the teleconference by providing sound, video, and data services by telephones, telegraphs, radios, and televisions. A conference call is a method of teleconference, which allows more than two parties to join the telecommunication system. This is a much more efficient way of communicating because you only need one massive telecommunication system rather than three telecommunication system. It also saves time.

A videoconference is a way of communicating by video and audio from two or more locations. It is also known as a videoteleconference. In this telecommunication system, a set of interactive telecommunication technologies interact to exchange video and audio transmissions simultaneously. It has also been called visual collaboration and is a type of groupware.

This technology is becoming more and more popular in society. Video phones or video calls are a type of video conference. Although communication by voice is still more common, video conference will increase its popularity as the technology becomes more affordable and simple.

Telecommuting, is a work arrangement in which employees enjoy flexibility in working location and hours. In other words, the daily commute to a work place is replaced by telecommunication links, in which you can work using this telecommunication system. e-commuting, e-work, telework, or working from home are other words that have similar meanings with telecommuting. There are a number of telecommuting jobs. One of them is ligitation coding. Litigation coding involves the capture of information from documents to assist professionals by storing their documents electronically and by making it possible to locate the documents using keyword search criteria. You can do this job at home.

Digital television (DTV) is a telecommunication system for broadcasting and receiving moving pictures and sound by obtaining digital signals. It is different from TVs because TVs use analog signals instead of digital signals. Digital television has several advantages over traditional analog TV. The most significant difference is that digital channels take up less bandwidth space. This means that digital broadcasters can provide more digital channels in the same space. Therefore they can provide a higher definition digital service, or provide other non-television services like pay-multimedia services and interactive services. Digital television allows special services such as multicasting and will show electronic program guides.

Currently, one of the most fashionable technologies within the Internet is push-pull technology. The push technology enables services to be targeted at the user, without the users having to collect the information by themselves. For example, most people are signed up to some internet site. When you sign up, you are probably required to give your e-mail address or home address. Then you receive information about a product by e-mail or mails. You are given information without having to go look for it. The pull-technology is the part where you go and obtain information from the internet

#### T154 - Mobile phone and associated services and uses by Sam

Since the introduction of mobile phones in the United States in the late 1980s, this technology has come a long way. When mobile phones were first introduced, they were outrageously big, expensive, and the battery ran out quickly. The functions available were very limited; all it could do was call and receive calls. No, it did not have email or internet; actually it didn't even have a phone book function. From then to now, mobile phones have changed so much that sometimes I wonder if they should be classified as the same type of product.

#### Text-Messaging/E-mails

Probably the biggest use of mobile phones after the calling function (in some parts of the world bigger than calling) is the messaging services. With text messaging you can easily send and receive short messages among mobile phones. So instead of wasting time calling people to tell little things, you can text message them and save

time and often, money. Another function similar to text messaging is emails on mobile phones. Unlike text messaging that is done using phone numbers as the address, emails on mobile phones are just like the ones on the computers. You can send long messages to either computers or other mobile phones. What gives advantage to emails over text messages is that it can attach attachments. This means that you can take pictures with the built in camera of the mobile phone, attach it, and send it to your friends. This is especially useful when there is something you want someone to see as soon as possible. Also, using emails, it is possible for mobile phone users to subscribe to mail magazines which will automatically deliver them any news or information they desire.

#### Internet

Internet has become a big part of modern mobile phones. By being able to connect to the internet from your phone, our lives have been heavily affected. For example, if you need to know the weather, you can check it using the internet. If you need to know what time the next movie starts at the theater, you can use the internet to find out. Even if you need to make a quick payment, you can access the bank website from your mobile phone and make the payment. You can download pictures, ring tones, etc... of various tastes. Internet on the mobile phones is so useful that once you get used to it, it seems as if you cannot live without it.

#### Multimedia (video, music, games, etc...)

Probably what makes mobile phones so interesting these days is the fact that it supports various forms of media. Probably most common are the ring tones. On mobile phones these days, you can download or personally make ring tones of your favorite songs. Not only that, you can assign each song to each and every one of your callers. So you will know who is calling you by just the ring tone. Not only can you get ring tones on your phones these days, but you can put full song audio files and use your phone as a portable music player. This allows you to have one less gadget to carry around with. Another big media form is videos. Not only can you record video using the built in camera, you can download videos on your phones from your computer and enjoy them on the go. Yet another major media on mobile phones is games. Games have advanced so much on mobile phones, that the graphics and game play is already better than that of a normal game boy by Nintendo. You can download these 3D games online with big selection of games. Basically you can find any game you want and play it on the go.

#### Payment (Felica, Suica, etc...)

Recently, mobile phones have become a great method of payment. Not only can you pay your bills on the internet of your mobile phone, you can use your phone as a sort of credit card in Japan. When you go to a store, there is a machine that you can put your phone on. The act of putting the mobile phone on the machine acts as if you are swiping your credit card on the machine. Then these costs will be charged to your monthly phone bill. Same systems are found in coke machines, train stations, etc... in Japan.

#### Where Do We Go?

With the introduction of the iPhone by Apple, the mobile phones are sure to keep on getting more high tech everyday.

#### T155 - Digital entertainment versus live entertainment by Sung-Hwan, Chun

One of the important energizer in our lives is entertainment. By enjoying the entertainment, we can reduce the stress, and also spend the dull time enjoyably. Entertainment has grown with technology so it would improve to be more enjoyable. Nowadays, there is a TV, and computers to enjoy more conveniently. These are called digital entertainment.

Digital entertainments are electronics that lets people enjoy by showing us pictures, videos and etc. Where else, live entertainment is enjoyment created without the use of electronics. An acrobatic show, musical, and etc. are an example of live entertainment.

An advantage of having digital entertainment is that it is very convenient. TV lets people see an Amazon River right in their house instead of them going to Amazon. Also, digital entertainment allows people to entertain whenever they want to. If a person wants to listen to an opera, they could download it inside their music player and listen to it whenever they want to. How ever, in the case of live entertainment, people have to either buy a ticket or reserve the ticket and go to the opera house in set time to watch an opera. This is sometimes inconvenient, and people might not even get to watch it due to time or amount of tickets.

Another advantage of having a digital entertainment is that it gives people a lot of choice. If a person wanted to listen to a Jazz, then he is given a thousands of choice if he goes to Tsutaya. But, to listen to live Jazz, he would have a lesser choice to choose than the digital.

However, the live entertainment has its own advantage also. Unlike digital entertainment, live entertainment lets people entertain by sending it to their five senses directly. Therefore it would give 100% of what is given unlike digital entertainment which is given through electronics. Though, technology is growing fast and electronics is giving close to what is real, still I think it would never be same thing as live entertainment.

Another advantage of live entertainment is that it is most times not harmful to human body. We would be very unlikely to become nearsighted for watching waterfalls for a longtime. But in the case of digital entertainment, it is quite harmful to our body if we use it too long. This is why people with glasses are gradually increasing these days.

Each live entertainment and digital entertainment has its own advantages and disadvantages. The fact about which entertainment is better than other entertainment doesn't really matter. The perhaps the best way to use these entertainments is to use both of them efficiently. If we don't have time, we could use digital entertainment to watch a circus, and if we want to enjoy the real thing, then we could use the live entertainment. Therefore, we could use entertainments efficiently to relax and amuse people.

### T156 - Contents of digital entertainment, for example, violence, pornography and realism by Roger Maue

There are a lot of issues that is associated the world of digital entertainment that is available on the internet. Digital music is a broad area with sub-categories such as digital music, digital television, and digital video etc. Because of the sub-categories this paper is solely concentrated on digital entertainment on the internet. This could be things such as videos on sites where it is associated with the purpose of entertainment, business, etc. This is commonly seen in pornography sites or other sites set up for the purpose of entertainment such as YouTube or Google Video. There is also the issue of music and files that can be downloaded illegally or legally on the internet that is provided on sites or programs for free. A big issue associated with this area is the legality or content protection that are on the files, programs, and software etc. being distributed on the net.

It was mainly through the gaming world that this whole new technology emerged to expand into other areas making it a whole new realm of entertainment. As gaming programmers began to provide online gaming, the whole online era of entertainment related issues started to spring up too and eventually there was online videos, music, radio, and even TV broadcasts.

The stakeholders includes a diversity of stakeholders, including movie and television studios; music production companies; publishers of books and other written works; broadcasters; computer software companies; and video game makers. There are many large media companies span many of these categories. These groups differ greatly in their business models and approaches to content protection or policies about their products software etc.

Content producers or the stakeholders are deeply concerned about the threat that digital technologies pose to their ability to control the distribution of their works. Millions of people regularly use peer-to-peer programs to download copyrighted songs without paying for them, and the music industry attributes major revenue losses to file sharing. The movie industry fears becoming victim to the same kind of widespread piracy over file-sharing networks.

Arguing that "one can't compete with free," both the music and movie industries believe that file-sharing and other digital copying will destroy their businesses and their artistic control unless stopped. While many feel it is too late to digitally protect music against redistribution, movie and TV studios strongly believe it is both possible and essential to act now to protect their business. Studios are very concerned that if file sharing of high-quality video files becomes common, users will begin to "expect" free movie content, and the studios are anxious to preempt any such video file-sharing "culture."

Content producers are looking smatter technology and digital distribution channels as ways to enable even more focused distribution models. They picture a future in which consumers have many choices in the ways they receive their entertainment, from short-term rental downloads to long-term sales. Without effective protections from digital piracy, these new offerings will not be possible--the studios will not risk exposing their high-value content to widespread unauthorized redistribution. Certain providers of these "free distribution" of the digital contents are apprehended and judged such as Napster. But its impossible to keep track nowadays especially with p2p or peer-to-peer sharing of files over the internet.

Today's gaming developers have created games that are sold to children (under the age of fourteen) where they are exposed to all these "bad influences" at a young age. Despite controls by certain companies who have take action complaints, others are less responsive but still, the internet is a huge database where there are a lot free contents just ready to be used without payment.

Also the internet has grown too large that is seems impossible to keep exact track of offenders such as those that create all those trackers that track you after you enter a particular site or answered a survey or filled in a form of sort. This is ethically wrong since the kids are innocent and young it gives no right for an adult or person to spoil or corrupt their minds at a young age for it can have lasting effects on the children when they grow older.

There are certain times when advertisements on the internet such as pop ups are aimed a children with luring tricks such as winning a certain amount of money with the flashy and colorful display or the advert that says more fun games or free products of popular cartoon characters. If caught (which is impossible) these culprits could be tried and if they have other associates then there can be prosecuted by the courts under the cyberlaw rule of conduct for misuse or causing harm to the internet users. Some people or groups have been told to shut down their operations on the internet or to become legal and operate.

T157 Features of telecommuting, for example, environmental aspects, flexibility, productivity, business and social relationships by Vaibhav

What is telecommuting?

In simple terms telecommuting which is also known as teleworking is basically to work at home and communicate with an office or any kind of workplace through a computer, fax or a phone. Telecommuting is accreting at this time in the world. Recent figures have come to show that in the 21st century more than 30 million people in the United States were telecommuting at least once a day in a week.

#### What is telecommuting in business terms?

In the present world where resources are scarce time is money. There are a number of jobs today which require messages and data to be transmitted. To process or transmit information efficiently telecommuting is a good technology. Telecommuting avoids all the physical commuting a person has to do and also bring the cost of transmitting the information. Hence this technology makes work much convenient and faster as it requires less time and less work due to less physical requirement.

#### What are the environmental aspects of telecommuting?

In terms of environmental aspects, telecommuting has quite a few environmental benefits and some environmental costs. Some major environmental benefits that telecommuting contributes are savings in gasoline, a reduction in pollution, a decrease in traffic congestion, and lower highway accident rates.

#### How flexible is telecommuting?

Telecommuting is very flexible as it makes people's work less stressful in most cases as it reduces the time and money spent on transportation. It encourages most females in the society to work as they can work at home and take care of their children, where as if telecommuting didn't exist most females would stop working after they are mothers or while they are pregnant.

#### How does telecommuting raise productivity?

In economics terms "productivity" is defined as the quantity of output a worker produces in a certain period of time. The quantity of output increases in most cases as telecommuting makes processing and transmitting data much easier. As a result of this at a management level in work is made efficient and leaves the rest to the laborers. Hence in some cases where management level is a big key to the output, productivity is raised.

#### Is telecommuting reliable?

Telecommuting is reliable in most cases but there are cases where it is not. For instance if a employee is transmitting data via a computer to the workplace, there is a possibility that the data may be lost due to a network or some technical problem. This could be a problem if the data is not backed up. Therefore to conclude with telecommuting has certain risks and certain costs which in some jobs are greater than others.

#### What effect does telecommuting have on social relationship?

Telecommuting has some disadvantages and one of them is the relationship between co-workers. A boss in a company might not get to know the employee or a manager as well through telecommuting as he/she would not be able to see how productively an employee is working.

### T158 - Face-to-face communications versus communications via technology by Tanay

There are several issues laying at hand when comparing face-to-face communications with communications via technology.

For starters, face-to-face communications is direct communication from one source to another, where as communications via technology is indirect communication. Moreover, on one hand where face-to-face communications is pretty much a single option, on the other hand there are several methods of communication via technology.

Face-to-face communications pretty much explains itself and gives us an idea of what it is. Whereas, there are several aspects of communications via technology. The three most popular communication methods via technology are television sets, mobile phones, and computers. Television sets are commonly used to communicate messages to the public. Commonly known as broadcast systems, television sets communicate through the forms of news media, advertisements, and shows. All of these send messages to us. They communicate an inner language that helps us understand both the world and ourselves better. Television sets motivate us instilling us with dreams and imaginations – some of which are foreseeings of future comings.

Mobile phone and computers are much similar forms of communications. Mobile phones and computers help us to communicate with others on different ends of the world. Due to the advancement in technology both devices aid in countering dangerous acts, in fighting wars, in having peaceful settlements, and so forth.

But, unlike face-to-face communications there are many social and ethical issues when using technological communication methods. Due to our advancements in technology, we are able to track conversations through technological devices, we can alter conversations, or we can use one conversation against another to cause commotion. Electronic systems now reach into all levels of government, into the workplace, and into private lives

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to such an extent that even people without access to these systems are affected in significant ways by them. New ethical and legal decisions are necessary to balance the needs and rights of everyone.

The broad issues relating to electronic information systems include control of and access to information, privacy and misuse of data, and international considerations. All of these extend to electronic networks, electronic databases, and, more specifically, to geographic information systems. Specific problems within each of the three areas, however, require slightly different kinds of ethical decisions. Networks, electronic information systems in general, and geographic information systems in particular are discussed separately below.

Technology itself has become so hard to control that we have come out with rules to control our technology and have gone as far as introducing acts enabling us to misuse technology – such as the Patriot Act. Public agency mandates and the right to access of public records are also creating problems of a different sort. Some agencies are charged with responsibilities to study and thereby help protect endangered species, others to understand and help preserve archaeological sites. Some of these agencies are finding that detailed information about species and their habitats or about sensitive archaeological sites can also harm endangered animals or places. Habitats and sites become vulnerable because they become known. The problem lies in the right to access of public records. Agencies may decide that the best protection of species or sites is simply to not gather detailed information about them.

For more information, visit:

http://www.colorado.edu/geography/gcraft/notes/ethics\_f.html

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#### Face-to-face communications versus communications via technology by Taro

Face-to-face communication and communication via technology may serve the same purpose of exchanging various thoughts and information, but there are certain distinctions between the two methods. Face-to-face is obviously meeting a person or several people and forming words with one's mouth. We 'speak' and 'listen'. There is no other alternative action in that type of communication. Communication via technology on the other hand has some variations. It might be over the phone or the sending and receiving of typed words, such as e-mails and MSN messenger. In contrast with the face-to-face, phoning has the advantage of talking from afar, for example from one country to another.

However the drawbacks are that it is usually for only two people and as the distance between the them gets longer and longer, more money is required for the person calling. In addition to that, this type of conversation does not occur if one of the two has a defected technology or is in a bad environment. It is common that statics cause loss of messages. Also in the case of country-to-country, the time lag is often the problem. It is important to note that nowadays 'phoning' is not simply the use of telephone, but also can be the use of cell-phone or even computer program, like Skype.

Moving onto e-mails and MSN, these have a function that allows conversation with multiple number of people. Just like phoning, there is the good feature of long-distant communication. It is much cheaper so it makes it easier for one to keep contact with friends or relatives oversea. Another strong feature that can be noticed is the accuracy of the messages, since they are typed and are possible to be stored.

However the drawback this time is that in comparison with the face-to-face communication, the level of emotion that appears is very low. These can be improved to certain extent if the individuals use keys such as exclamation marks, or capitalize the letters. But they must be careful with this, since misunderstandings are frequent in net communication. The exclamation after a critical statement might make the receiver think that the sender is angry, when the sender was just being honest.

The minorities who support indirect conversation over direct one, emphasize that in situations where they are embarassed to tell their true feelings about something, like a time in which they are confessing their love towards someone, e-mail or MSN is preferable because they have time to think of good structured sentences. But again this can lead to a misunderstanding of the receiver; he/she not taking the message seriously would be an example.

To prevent such cases, specific areas are being improved by the manufacturers. For MSN messenger, the latest versions of it allow the simultaneous use of a webcam, which transmits one's visual images and shows it on the receiver's window. In this way, the receiver is able to see the facial expressions of the sender while he/she is chatting(typing).

Today the whole set comes in one pack: abilities of verbal talk, transmission of visual images, and typing words. So overall, communication via technology, especially MSN, seems like a better way of communicating than face-to-face. However even if the issue of emotions is cleared up, the fact that face-to-face is 'close' and MSN is 'furthur apart' sometimes show the difference in level of friendliness.

What is meant here is that when a person chooses one of the two types, face-to-face, to communicate with another person, he/she might be doing so because he/she really likes the other person and he thinks MSN is just for talking with someone who he doesn't talk to that much usually.

# T159 - Minimum requirements to enable realistic teleconferencing and videoconferencing by Harsh Sharma

In today's world, there are three problems that everyone's faced with: Lack of time, lack of money and lack of sleep. I know that I have those three problems for sure and many of my classmates are troubled with these problems too. I don't know about adults but one thing I do know is that everyone wants to save time and money so they can get more sleep. I personally think sleep is the most important thing however that is not what the topic is about. The topic is about teleconferencing and videoconferencing. The reason why I was talking about time and sleep is because one MAIN reason why people do teleconferencing in the first place is in order to save time and money.

First of all, what is teleconferencing and videoconferencing? Teleconferencing is simply a conference where participants in different locations are linked together through a communication device. A communication device could be anything from a cell phone to a computer connected to the Internet. Video conferencing is simply teleconferencing but with video. Most business executives prefer video conferencing because the interaction is more lively and real then.

Minimum requirements for teleconferencing and videoconferencing are mainly having a computer that is connected to the internet. That's pretty much it – as long as you have a computer connected to the internet, you can have a video conference. People might argue that teleconference might be done with a mobile, however, in this case we are also referring to videoconference and for that you do need a computer. Unless you live in Japan and have one of those phones where the users can see each other while talking! OK perhaps having a mobile is sufficient enough to have a conference but most business executives use computers because that is the right and the formal way to do it.

Of course you can have more than just a computer. In order to have a no-disturbance videoconference certain things are needed. First of all, a FAST Internet connection is a must. Because if your internet is slow then the images will be received slowly and the interaction between the participants will be poor. Then you need a good microphone because the other executives should be able to hear your voice clearly and have a decent conversation. Thirdly, you must have a good quality web cam so clear images are presented to the other party.

These three things should make your video conferencing experience smooth. However, if you have the new Mac and the other party has one too then you can use Apple's iChat to have an almost-real-life videoconference. The program works so smoothly that it seems like the person is actually sitting on the other end of the table. Four people can be in a VIDEO conference together! And can discuss issues like they are in one room! But then, Mac is just on a whole another level and might be a bit expensive for some people. So the three things listed above should be available in order to have a decent videoconference.

In conclusion, you need and must have three things in order to have a video conference: a fast internet connection, a good microphone and a good quality web cam. In order to have a teleconference, perhaps the need of a web cam is not required. And the reason why people are choosing to do this in today's world is because it saves them hours on the plane and also the money that would have been spent on the air tickets! It all comes down to money.

### T160 - Undetected intrusions into IT systems, for example, phone tapping by Xiaoxiao Li

What is the main problem here? The main problem is that these "undeteced intrusions" which aren't just limited to phone tapping can have a huge impact on the company. For instance, if Yahoo!'s IT system was intruded by a highly qualified and highly paid hacker then the company could lose all it's data and the website would probably be shut down for days, even months or forever! Of course, that's major exaggeration but that's just to show what kind of impact undetected IT intrusions could have.

Let's start with phone tapping since it's part of the topic. Phone tapping is when a third party gains access to the phone lines of another party. This can be done by playing with the wires or bribing certain people. Since phone is a very popular way of communication in today's world, the person who has tapped the phone has access to the victim's entire life because telephone calls are made to everyone — your doctor, husband, lover, friends etc! Socially, this is against the law, especially without permission. Even with permission, it's plain invasion of privacy, which just isn't right.

Other forms of "undetected intrusions" can be hacking of someone's email. But since we are talking about "IT systems" here the hacking could be of an entire computer. A qualified hacker or someone in your family can do this. And I do mean to imply that nobody can be trusted in today's world and even your family members might try to hack into your computer because they want to know what you do and everything.

If someone does indeed hack into your computer without your knowledge, then he would be able to read all your e-mails, all your saved MSN and Yahoo conversations and if he's intelligent enough (which he should be since he hacked into your computer) he'll able to view all the saved passwords to all the websites you visit!

And you won't even find out about it until the damage is done. Socially, just like phone tapping this is against the law. Any form of invasion of pprivacy is against the law, if done without permission. Ethically, this is very wrong because simpy put you are invading the other person's life without even letting him know! People do this all the

time today, especially the jealous and protective lovers who want to find everything their partners are doing when they are not with them.

There are other forms of intrusions too like a virus or a bug in the software, which can cause all the company's data to just vanish. These viruses are either sent by random hackers or paid hackers. Therefore, all these anti-virus companies are making so much money today because everyone's scared of viruses because it's very hard to recover lost data and sometimes it's too late when the virus is found. Therefore, in order to detect the "undetected intrusion", anti-virus software is needed. The best way would be to just buy a Mac because Macintosh is known to have no viruses!

Basically, it is wrong to intrude somebody else's system! It's wrong socially because it's against the law and ethically because it's clear invasion of privacy. You can protect yourself by either installing anti-virus software or creating a really complex password that'd be really hard to guess. Or you can just buy a Mac and let it do the work for you.

#### T161 - Personal mobile devices, for example, PDA, laptop by Vaibhav Bhandari

PDA stands for personal digital assistant. According to dictionary.com personal digital assistant is "A lightweight, handheld computer, typically employing a touch-sensitive screen rather than a keyboard, generally used for storing information such as addresses or schedules. Many PDA's include handwriting recognition software, some support voice recognition, and some have an internal cell phone and modem to link with other computers or networks." So basically in simple terms a PDA is a phone which has multiple features and has widely come to be known as pocket computers and palmtop computers.

Out of several features the one that makes PDA so unique is the touch screen. Touch screen is a virtual keyboard which enables a user with an easy soft click to access around the system. This feature helps the user navigate around the device faster than typing with a normal keyboard. The PDA also has a larger screen than normal cell phones which enables users to easily view websites. The PDA has a strong wireless network which helps one view websites online. Most PDA's have Bluetooth and infra-red which also enable data to transmitted between PDA's and laptops.

Most PDA's also have a word processor, spreadsheet viewer and PDF file viewer. All these features make life easier and efficient for business men. All these features help a business man to access information easily on their phone. Although the screen on PDA is smaller than a normal computer monitor the information is still viewable and pays off at crucial times. The same goes with the wireless connection. Although the speed at which data is transferred into a PDA is no comparison with the speed on a computer, chatting and video conferencing from a PDA is still happen able.

In today's world where even some teenagers have access to PDA's gaming has also become a popular feature of PDA. The overwhelming gaming addiction has lead to downloading of several additional installing software's. For people to download more of these software's a certain amount of hardware is not enough. Additional hardware is required therefore in this case memory sticks play the role of additional hardware. With memory sticks people can not only download software's and plug-ins but can also experience the joy of listening to music and watching videos.

Automobile navigation has also become a well known feature of the PDA. With the help of GPS (Global Positioning System) people can now easily access to road maps, traffic level, and dynamic routing. This feature in the PDA has been very useful to the people traveling from city to city.

PDA not only has designed to use for business and social purposes. Recently it has also been used for medical and scientific purposes. PDA has been used recently to provide aid diagnosis and drug selection. What happens is there is a drug database which helps the patient gets information on the particular drug he is taking. It has also been used as a way of communication between the doctor and the patient when the patient is not in a remote area.

In conclusion PDA has several benefits and very limited drawbacks. Some of these drawbacks are ruggedness, weather and water resistance and power considerations. Overall PDA is helpful for many business, social, scientific and educational purposes.

## T162 - Emerging technologies as the result of convergence of computers and communications technology by Alex with additions by Nitish

Computers have allowed many types of technologies to emerge and expand than ever before. As a result, humans have begun to utilize resources better than previously and also, have begun organizing them. Computers also have allowed certain technologies to be used from allowing a specific group to any person who has the right materials. Computers have allowed us to think beyond manpower and our limitations. For example, previously, we used to calculate using our hands or even instruments far predeceasing the calculator. Now, to calculate, even the worst computer will have a calculator. We have moved on from 2d to 3d. A thing which would have taken 2 days to build now takes only 10 minutes. For example, we built our sketchup models on our computer in less than 40 minutes. If we had used paper and done 3-4 drawings depicting a 3d realism, then it would have taken far beyond that of sketchup.

For example, video conferencing used to be very limited because it was very difficult to set-up, expensive and was not used by many people. In fact, it was impossible. People only dreamed of such software which would be free, cheap (or better, cost nothing at all) and easy to use such that anyone could use it. Now in this century, anyone (any person with sufficient amount of experience with computers) can set-up video conferencing on the computer or a laptop and with an internet connection and a software such as instant messaging. Such an example is VOIP.

VOIP (voice over internet protocol) has been another technology that has emerged with software such as Skype. Skype (IPA pronunciation: /sknip/, rhymes with type) is a peer-to-peer Internet telephony network founded by the entrepreneurs Niklas Zennström and Janus Friis, also founders of the file sharing application Kazaa. It competes against existing open VoIP protocols such as SIP, IAX, and H.323. The Skype Group, acquired by eBay in October 2005, is headquartered in Luxembourg, with offices in London, Tallinn and Prague. Skype has experienced rapid growth in both popular usage and software development since launch, both of its free and its paid services. The Skype communications system is notable for its broad range of features, including free voice and video conferencing, its ability to use peer to peer (decentralized) technology to overcome common firewall and NAT (Network address translation) problems, and its extreme countermeasures against reverse engineering software {www.wikipedia.org} the or protocol. Skype has enabled us pc users (and mac users) to extend our limitations beyond the telephone. We can now call to anyone with a microphone (which comes with almost every pc) and speakers. Better yet, if you have a web camera, you can do live video conferencing (a dream in the past, reality in the future)

Of course gaming is another emerging technology. A video game is a game that typically involves user/player interaction with a controller interface to generate visual feedback on a video screen. Generally, it also has some system of reward presented to the user (such as points) in return for meeting certain accomplishments within the framework of a given rule set. The "video" in "video game" traditionally refers to a raster display device. However, with the popular use of the term "video game" the term now implies all display types and formats. The various types of electronic systems on which video games are played are known as platforms and examples of these are personal computers and video game consoles. (www.wikipedia.org)

Producers make many kinds of graphics cards and many types of games including shooting games, action, sports, strategy games and many other types. Some popular ones include Half Life, Command and Conquer, WOW, etc. But coming to the main point, previously, gaming used to be playing board games or just sports. No one could ever think of digitalizing the whole experience with games. Therefore, with the emergence of computers, we have enhanced our word for 'entertainment'.

Other emerging technologies would be that of forums and personal life on the internet. Every day, more and more people are involved in forums and constantly discussing whatever they would like to talk about. Sites such as My Space and Facebook are examples of where people post and talk about there personal life and also chat as well. Although they are social groups, they also have forums of their own.

A social network service is social software specifically focused on the building and verifying of online social networks for whatever purpose. Many social networking services are also blog hosting services. As of 2005, there are over three hundred known social networking web sites. MySpace, Facebook and Friendster are some well known examples. (Wikipedia.org)

An Internet forum is a facility on the World Wide Web for holding discussions and posting user generated content, or the web application software used to provide this facility. Web-based forums, which date from around 1995[citation needed], perform a similar function as the dial-up bulletin boards and Internet newsgroups that were numerous in the 1980s and 1990s. A sense of virtual community often develops around forums that have regular users. Technology, computer games, and politics are popular areas for forum themes, but there are forums for a huge number of different topics [1] (wikipedia.org)

Lastly, digital downloads have emerged as well. In the US, people can rent movies through the internet on sites such as Netflix and also on iTunes, people can buy music digitally. Previously, we used to get cassettes, and CD's. Before that, it used to be on big records, and on reels. The emergence of computers has allowed us to ease the process of going to the store or buying it. Other people use torrents to download music or movies.

With the emergence of technology as a result of computers, more and more things are becoming common and new technology is invented every day, thereby, helping us improve our way of living and modernize it.

### T163 - Public information systems, for example, traffic control, security camera systems, public transfer information systems. by Roger

There a lot of pubic information systems that range from being sophisticated to a simple one and have a lot of uses that are generally aimed at the public. There are also others that are aimed at the public that are interested at certain aspects of the world such as the Interpol, a worldwide police force organization that works to help capture criminals who flee a country to get refuge elsewhere. But usual it refers mostly to a state's government organization such as NAPHSIS (National Association for Public Health Statistics and Information Systems) on the internet where people can access it and see what plans or measures etc. are posted and follow up on it.

Basically the various public information systems are to the benefit of the general public so such things as traffic control are a crucial part of our modern day daily life as we know that the traffic control helps keep the traffic

lights functioning perfectly so to move our vehicles moving in a harmonic and smooth-flowing way as much as possible without causing an accident. To have a central traffic control helps the public as they can commute safely because without it, the roads will be in chaos as each driver tries to go his own desired route causing trouble for the countless others looking to commute to their desired destinations too.

Other important things that have been introduced into our society recently with the development of technology are security cameras which ever since their introduction till present day, have had a major effect on our daily lives as we have come to depend on them as a tool of protection, or keeping watch or ourselves or properties etc. and in doing so making sure we are best protected. The security camera systems in public places such as street cameras and highway cameras are helpful in that a street camera can help identify people if they are recognized as threats and keep an eye on them.

Despite the arguments that it is an invasion of privacy but on the bright side, it can help protect or benefit a lot more people. The highway cameras are a definite success and vital part of the road management of the speeds of motorists. Since its introduction it has played a crucial part in saving a lot of lives and helped to reduce traffic fatalities and accidents or various sorts and there has been a worldwide recognition of the frequent use of highway cameras.

Public transfer information systems are general notices or just information posted or published for the business, universities, banks, and other organizations. Public transfer information systems are provided to the public interested in the information published as they will use this free information to do something that is connected to publisher or authority directly linked to the information. It helps to make know to the public information that concerns the people doing business or teaching so that it can be accessed by the public or people in specific areas of work so they can use and apply the information to their use.

For ex: a company may post a public notification of the next meeting for potential shareholders or its current shareholders of the profit gain. But sometimes the systems are abused since its public and not a lot of watch is kept over them to filter out whatever that is rubbish or not. But it is fairly common practice for a company or organization to have a person such as a web publisher or computer expert keep track of the useful information and filter it out. But otherwise the these public transfer information systems are overall useful to an extent since it can help spread messages, requests, and other information quickly since the public or a large body of people would most likely access it and see it.

Technology has really helped society as a whole quite a lot such as security cameras and not only for security purposes but there are also other small technologies such as automatic street lighting where as soon as it is dark then the lights are turned on automatically by its sensor. But overall it has beneficial aspects but there are always people who discredit it for some reason which is underestimating the real benefit of using these technologies.

In the modern world, with technology expanding in daily life and all aspects of it, it will be a disadvantage not to use such things. In this growing world the cooperating with each other using technology as one of our key tools of communication and usage. The technologies help both locally and globally as for ex: if local authorities fail to capture a certain criminal then their will be public information about the reward or the watch out and the public will be notified and also globally, request for the capture of the criminal if the criminal is in the foreign country. So both will be affected but through their cooperation they will most likely apprehend the criminal as both will be on because security cameras in airports and all transportation terminal or points will have or be prepared for the surveillance.