

The Impact of ICT on society.

Introduction

I will be looking in detail at all aspects and results of ICT on society on a whole. By doing this I hope to look in detail at the benefits and misgivings on what seems to have been a global change which has an impact as large as that since the birth of the telephone by Alexander Graham bell.

Undoubtedly communications technology has revolutionized extremely fast in the past years, it has grown from a phone which resembled the old house hold brick to devises which can be the small the household computer mouse. They also contain technology which enable you to send graphics even video in real time to others, and have change from the old dot matrix screen to and a black LCD screen to the High resolution colour screen which people use today.

Although this has been greatly enhanced by the highly lucrative and growing market of mobile phone, there is continual pressure by Civil Rights Groups complaining that the government has technology to create a supposed “big brother society” and have also complained about conversations been supposedly snatched from the air and taped by any government services which may want to do this. The currently law as it stands enable the government to tale any conversation from, the air if they deem it to be a threat to national security. This requires backing from either

- The home office
- The foreign office
- Her majesty’ s Secret Security Services
- MI6
- MI5
- Special Branch
- Technical Support Unit

However all these require a signature form the home secretary David Blunket or relative counterpart.

The use of technology has undoubtedly changed the world of communication and the ability to receive send information regarding just about everything. With such a broad scope it was inevitable that people would eventually exploit or attempt to undermine it from hackers to prank callers or from thief’s to crackers. From Courts to Homes, ICT has had an overwhelming impact of society as a whole.

Crime in relevance to mobile phones is not just restricted to violet theft regarding them; there are also situations where organized crime is or castrated using mobile phones. There are also situations where nuisance calls are used by mobile phones and thus are causing companies to loose business because they simply can’t get their customers through to their phone lines. Also due to restrictions in the technology of the police they do not have the power to trace mobile phones to their users of these prank calls if they are not registered.

Also there are fears of mobile phones technology creating a “big brother society”, with the Army, Navy, and Air Force and National Security Services being able to track the signals form ANY mobile phone with in 5 meters. Such tracking does not require a Signature from any minister and can be done on the accord of any agent of these services. For further details visit www.homeoffice.gov.uk, www.mi5.gov.uk .

Not just this but there are increasing controversy with the supposed “brain frying” effect of mobile phones and their radio active particles on the brain. There have been increasing press attention to the excessive use of mobile phones leading to traumas of the brain. Although no mobile phone company will submit to a public and impartial inquiry, probably due to fears it may be detrimental to their financial stability of that company.

Communication

The use of mobile phones is growing ever more quickly, with the target audience youngsters more and more phones are being purchased and more and more connections are being made. If used correctly mobile phones can be very useful as modern technology and in the short run are very useful. However a recent paper that was published proves mobile phones are very bad for our health. They emit just the level right level of radiation that can decay our brain cells. If used a lot mobile phones could cause major problems for people’s health in years to come. Another recent thing is the Internet and with the wide growing use of the net, faster connections to it have been made available for public. How fast your connection varies not only from how much you pay but where you live. Here in Britain a 556k connection is about twenty-five pounds a month. In China a 13gig (13,000,000k) connection works out at about the equivalent of three pounds a month! The internet offers chat rooms, email and programs such as MSN Messenger that allow people to communicate all over the world. A problem with chat rooms is any random person could join the room and these allot of these people cannot be trusted! They could be anyone, anywhere as it is very easy to lie. A recent research study shows that Spam mail (junk mail) costs British companies a total of three billion of pounds in business and thousands of hours in labor. It also says that people receive more Spam emails than real emails. This is due to a supposedly 50 spammers from the United States of America that sent 90%

Access to information

Anybody can access information from across the world. Names, places and people can and have been found using the World Wide Web (WWW) and using various CD-ROMS. Although the WWW offers a wealth of information it also contains allot of very inappropriate material such as pornography. This has a habit of accidentally popping up and being advertised all over the net. Parents are sometimes afraid of letting their young children onto the net because of this. This is one of the main problems as pornography is the most accessed material on the Internet. CD-ROMs have their downsides, they can only contain so much information and if not taken care of properly can be damaged terribly, beyond use, and they cannot be repaired because of the way they are made. CD-ROMs and the use of the net have replaced a trip out the library.

Crime Prevention

It has been reported recently that you cannot walk through the center of town, without being captured on CCTV. You are being watched when you shop. This ‘Big Brother’

type of filming does have a positive effect when it comes to cutting crime, but is it too much? We begin to ask, whether it begins to violate our civil liberties and our rights to privacy.

Every criminal that has a record is inputted into a 'criminal' database, allowing the police to check quickly and efficiently, criminal records.

The forensic department takes a painstakingly long amount of time, when sampling fingerprints. If the fingerprint identities are inputted into the computer, searching for records, or sampling fingerprints will become easier, and quicker

Those houses that are equipped with burglar alarms have a drastically reduced chance of being burgled. These security systems are a worthwhile investment, and help protect your home in the long term.

Also with the new biometric details being put on the proposed nation identity cards the government is going to be able to know who's who and eventually everything about you. Although there are complaints that this is going to eventually culminate in the "big brother" society people on the whole seem willing to have identity cards through concerns that Terrorist are able to go thorough out the UK, and this will help prevent such things from occurring.

Entertainment and leisure

VCR's have been used for a very long time to record from TV and watch say a film or a program that has been pre-recorded. The newer DVD's are much preferable as they have greater graphics, better sound quality and generally much better Quality to the film industry. Also leisure has improved with Text updating of goals and the new 3G mobile systems when send you the goal using there video service which is nothing short of remarkable. Also football stand and City centers everywhere have the new Huge Television systems to host football games which have helped people who aren't able to get to the ground or see the action of the game or just have poor eyesight and aren't able to see the distances of the football pitch. Also more and more people have been blamed getting over weight or obese because of entertainment being of such a high standard people reject physical activities to sitting down and watching their favorite soaps. This is especially true for children who stop playing and interacting with other children and just stays inside and uses the entertainment mediums such as television and the internet. Also it has become common practice that young children obsessed by video games and television have become so called "social rejects" and are actually unable to interact with their peers parents and teachers properly simply because they don't know how.

Effect on jobs

The effects for jobs has been paramount, it has been singly responsible for a huge job cuts and expediential job vacancies with in the highly competitive computerized field. Computers and ICT have in itself crated a whole new industry and within that a hundreds of sub industries from word recognition tools to ID cards. These all need to be made produced and sold and so this is when the western world has come into its own. People in the United Kingdom owning a computer has increased by over 80% since their introduction in 1998. It has created hundreds of business and thus jobs. It has opened way to online shopping which a huge industry in the modern age with people is not only

buying computer related software but groceries from online shopping from Tesco. Also this has been a great help for employers who have been able to organize personal files and wage systems. Using mail merge you can do virtually anything in regard to wage systems. It also has great tools with regarding making letters and other things like that. It has also made industries such as accountancy and filing a lot more simplistic with tools that do most things for you and help most fields in one way or another.

Effects on Online Shopping

Online shopping has advanced considerably. People buy things online a lot more often with music being the biggest seller, and then software and computer related items. Such things as going the weekly food shop has also improved with organization such as Tesco having 7% of its revenue now produced buy online shopping. That 7% is what other organization that other originations such as ASDA are loosing out on. Although it is not in this field where online shopping has come into its own, Holiday and insurance offers phenomenal discounts for online shoppers who purchase their products online. Although online shopping obviously have its disadvantages for reasons such as credit card fraud. It has been a revolutionary impact on society. For convenience with and easier access to more food have been blamed record levels of obesity in most of western society. With people getting increasingly lazier for modern day convenience people are becoming less reliant upon themselves to do the most primitive things such as shopping.

Mobile Phones

Mobile phones have advanced considerably in recent years. They take up a huge Market and have contributed significantly to the western worlds becomes. Most businesses that are solely involved with ion mobile phones such as Vodafone are worth over 368Billion with assets growing every year. This is due to a highly competitive market to which the government plans on exploiting at every possible opportunity. For example the new wave of 3G mobiles have just been launched but the contacts written by the government to sell such phones in the United Kingdom have been sold for over 30BILLION a piece.

Mobile phone companies have also came under criticism from the government watch dog that have recently imposed plans to sue companies which have put forward plans to sue companies and make sure they can't over charge people for using their services.

Mobile phones have also been blamed for adding top the so called "big brother" society as mobile phones are able to be tracked within 10 meters in serious crimes such as kidnap police use this and track these people.

There are also complaints by people saying that mobile phones "fry" the brain, and having that technology so close to your ears and caused the to have brain tumors and may have resulted in them having operations to remove the cancers which mobile phones have supposedly caused. Mobile phone complains of cause have hotly rejected such claims but they are yet to invest in an independent enquiry into the matter to try and get to the bottom this. Then again they wouldn't would they incase the results were damaging.

The government have also failed to act on this, and although there have been an increase of cases involving tumors, they are still failed to act on public opinion and fund an enquiry. This also could be due to the amount of revenue from mobile phones the

government gets and whether they wish to put this into jeopardy by giving in and funding an enquiry.

Also mobile phone technology has improved as a whole with SMS MRMS people are finding ever more ways of keeping in touch with one another. Also mobile phones can now carry video recorders, cameras and a whole range of accessories which can be attached to mobile phones. People have ever more ways to keep in entertain them selves and also businesses can benefit by the video conferencing utilities available on mobiles. There are some legal aspects involved with mobile phones such as “prank” or nuisance calling, which is unable to be traced properly through the police if people fail to register mobiles or even if they do, if they haven’t provided the correct details not much can be done other than to block the SIM card that was registered with making the calls.

Fax Machines

Fax machines have not really progressed with the invention of E-Mails, faxes have become almost obsolete and people are generally using emails rather than faxes. However faxes are still used by most business for transferring documents of urgency and do not wish to use Email to send them. Fax machines can now be more widely used with most new computers having a fax utility on it and so more and more people have access to Faxing Programs.

Home Telephones

Home telephones have improved a little but not nearly at the rate of mobiles. Though people in the United Kingdom are still more likely to have a house phone than a mobile, most are still generally bland and just the facility to call people. However you can get cordless house phones which are a little like mobile but have a much smaller range usually only about the size of the house. You can buy from shops such as Argos house phones which can send E-mails and texts. But these are rare and there isn’t really a huge demand for them.

The Internet

Undoubtedly the biggest change to modern day society is the internet, and unlike most areas it has no limit to where it can stop. With businesses getting huge revenue from it and companies being able to set up an entire franchise based around the internet it is undoubtedly good for any economies which have its people use it. The internet is responsible for linking well in excess of 100 million people together all at once and any time during the day or night. Although day and night isn’t really distinguishable on the internet as one person’s day such as in the UK may be another person’s night say in the USA.

Although this phenomenon isn’t without its faults and people are often complaining about the following things to which the internet has been blamed for.

- An increase in Child Pornography and Pedophilia, (The internet itself can not obviously be blamed for these things it is the people who use the internet and brandish it with these things. Also parents are concerned that their child will be

“groomed” in chat rooms, picked up by a pedophile and then subsequently meet up with this person, where illegal things can be done. Though this is extremely rare the press attention by this has been extreme and negative with the case last year of a 12 year old going off with a 39 year old marine where they went to Germany together.)

- Fraud (This isn't credit cards frauds largest problem though it does make it easier for information to be transferred to others. It is also possible for people to steal your credit card details over the internet through Trojans which create a back door passage into your computer, Keyloggers, which log every key typed by your computer, or Bogus Websites which claim to be selling this but don't and instead steal your credit card details.)
- Criminal Damage (people's computers which are extremely expensive have been damaged by viruses, worms and things of that nature which harm the software needed for that computer or operating system to work. There is protection against this, such as Firewalls and Virus Scanners.)
- Abuse (the internet connects people all around the world to one another, if one person chooses to abuse another there isn't much in the way that the person who has been abused can do. The most they can do is simply complain to their Service provider or the messaging service which the person has abused them through. The police can deal with it but it's rare and there isn't much what they can do as if it is from various countries it is a long winded process and one which they don't usually wish to follow up)

The internet must seem like a god send to all those people wanting to research things or generally just want to get access to information now don't have to trail from endless books in libraries but are not just able to search what they want in any reasonable search engine I.E. www.google.com and you can simply view the information on any website affiliated with it.

I also think that's people who use the internet for legal and justifiable reasons with good intentions will find it is an extremely useful tool for any number of reasons. For example it can be used by students for revision purposes, the internet can be used to invest in shares or even buy the groceries. (For more information about the implications about online shopping see the title above.)]

E – Mail

E-mail has undoubtedly taken over the post industry, with people sending millions of messages through email everyday Post services such as the Royal Mail are lagging behind the almost unstoppable force which is email. People using email services are also a lot more likely to send more emails than would ever send post as it is much more accessible and requires much less work. Though emailing has obviously come on leaps and bounds there are many flaws in the system. Like any system it is open widely to abuse and people abuse it severely. Such as the thousands of SPAM messages sent everyday to hundreds of thousands if not millions of people that do not want their email details passed on, do, and they end up with their emailing inbox clogged up with unwanted emails. Also abuse via emailing is common and crude and emails that some

may find offensive is also found to be a persistent problem. Until the new law is passed to prevent this then many people will just have to put up with this as blocking the sender of these emails can often result in the person simply using a different account which isn't blocked and the abuse continues. The only way to possibly get any action done against this is to contact the service provider who may choose to ban that person from using this tool completely. However this doesn't always stop the abuse as many people just use a different service provider.

Traffic Control

Traffic control has been enhanced considerably since the birth of computers. With modern western Societies have been invested in automated traffic control systems. Most modern city centers have a computer control network with one of the most powerful computers within the country. It works by monitoring the traffic and diverting it or stopping it via traffic lights before congestion occurs. Although in cases where there are severe congestion such as rush hour, the system is unable to stop the sheer number of cars from getting congested in the obviously inferior roads. In such a case it tries to keep Damage to a minimum by taking control of traffic lights and keep on top of the traffic. Traffic Speed Cameras also help save lives by putting an incentive of not getting a fine if you get the fine if you do break the law and travel at illegal and unacceptable speeds. The government has increased the number of speed cameras dramatically saying that they have huge impact of the speed the drivers travel down roads. They argue that if Speed cameras have resulted in the lack of deaths of children especially on busy roads. However the huge amount of revenue used by the Speed Camera fines has angered some drivers, and people have even been caught vandalizing and damaging the speed camera so it doesn't work because of this.

In the United States of America, scientists at Boston University has invented robotically controlled bollards. These bollards work by being big and red and making drivers divert from their course in order not to hit the bollards, these bollards are used by a laptop and GPS and are positioned to protect work men and officers attending to Road Traffic Accidents.

Traveling

It is often the case that airports have to delay aero planes from taking off due to faults in the system, people often complain of this and the government took the inative and controlled all air traffic from one control system. Though it had some starting faults it has had its benefits and traffic control as a whole has benefited or the government says so. Traveling abroad is run by computers and location systems have been essentially created for this industry. All modern aircraft by international law have to have special computers onboard which track where they are going their speed and where they are, in planed they even track their altitudes. Also it aids them if there are other dangers such as other aircraft and things to that nature controls. The effects on people are stark as there are millions upon million of people that have benefited with their life with this newfangled technology. The effects upon money are also vast, as each bit of technology costs have been huge. Each set top box that every aircraft has a cost of around £5000, which when

you think of the cost of air aircraft as whole isn't much but £5000.00 for a company which has over 1000 aircraft it all adds up, not to mention the back up systems and what not the financial implications are huge and then to add to the fact they have other technology such as radar and long range communication devises, it all adds up, and who will the airports pass this cost onto, it will be the Consumer. The legal aspects to this are that if they didn't have this technology the airspace of the western world would be closed to these aircrafts. Ass they would pose and unassailable risk. The modernized world all demands that aircraft have these safety protocols in their aerospace and that may be why the UK had one of the best safety records in air traffic in the world.

Shopping Barcodes.

Imagine getting a full set of shopping and not having to wait in the queues to wait to pay for them, by you can scan them as you shop, this have paved the way for even more connivance for shoppers. There is how ever a few downfalls to this new technology for example if you pay using this technology do the company actually know how many items a person has scanned and how many items the person has actually paid for. This new system must also be used in conjunction with the old system as many people may not choose to use this, as with all new technology some people are scared and don't like to use it because of fears they may blow something up. This ignorance to technology no matter how stupid is the case for most new technologies of the modern age and only the young seem to be embracing it. So this would obviously initial a huge expensive on behalf of the supermarket who has to fork out for both methods of payment. The moral aspects of this are can people be trusted to use this new system, or will the supermarkets select the people who will use the system, This may pave way to a fascist society where only certain people can do certain things because of their background creed or colour.

Digital Duke Boxes and Piracy.

Digital piracy is a huge part of modern day society with music and games available for free on websites and Peer to Peer programs. These new methods of transferring information totally contradict the work of record companies of whom to try hard to get their band or company of its feet and be successful. As a result record sales have fallen considerably and internet downloads of songs is rife. This is because people won't pay for soothing which they can get quite easily for free, songs record labels films and even pornography is totally free on these illegal sites. Fact or federation against copyright theft has tied hard to counteract this threat to the industry and thus far have been extremely unsuccessful, although they do try to prosecute people and I thin only this week a bootlegger responsible for millions of pounds of damage has been put behind bars but still the threat is very real. The effect of people is that they get lots of free music, the effect socially the economies of the world have been stunted by this theft. The effect morally is the people are essentially stealing for there idols and heroes.