In today's society communication technology plays a big factor in personal life as well as in the public arena. Nowadays it is so easy to keep in touch with our friends and family all around the world with the technology of today. It has basically improved over the last ten years. Every household now has a major communication system. Many new form of communication technologies are also used in the public for business. Some of these include the mobile phone, internet, intercom, walkietalkies, scanners, radio, television, video conferencing, computers, cash registers, fax-machines, e-mail, computers, mp3 players, i-pods, cameras, etc. In this essay I would be going into further details into each of the communication system and I would be talking about the following in-depth; mobile phones, e-mail, computers, and fax-machines.

#### **MOBILE PHONES**

A mobile phone, also known as a cell phone, cellular, cell, mobile, hand phone or even simply a phone, is an electronic telecommunications device with the same basic capability as a conventional fixed line telephone, but which is also entirely portable and is not required to be connected with a wire to the telephone network. Most current mobile phones connect instead to the network using a wireless radio wave transmission technology. The mobile phone communicates via a network of base stations which are in turn linked to the conventional telephone network. It is a wireless and compact, easy to use item. It can be used for personal or business and there are many types to suit everybody.

In addition to the standard voice function of a telephone, a mobile phone can support many additional services such as SMS for text messaging, packet switching for access to the Internet and MMS for sending and receiving photos and video.

### Impact on private life

People can keep in touch with each other at all times.

- Has improved communication all around the world.
- Helps parent to keep track of their children when they are not home.
- It can be used to shop

### Impact on public life

- Can be used for business
- Can be used for Gardai investigation
- It can be used to keep in contact with the office when you are away from it.

## **Advantages**

- Cost effective
- It is not very expensive to purchase
- It is easy to use
- It can be used for entertainment for example the games, etc.
- You could use the internet as well as send mail on the mobile phones
- It can be used in police investigation.
- More business can be done outside of the office.
- You receive call and information from any part of the world
- It keeps you up to date with information.

# Disadvantages

- It can be broken easily if not careful
- It can be expensive for those who cannot afford it
- It can be without network which means you can not receive information or either call or receive calls and it could be bad for emergency reasons
- Privacy is not maintained as the phone company records all your calls
- When you lose your phone all the information and contacts number is lost
- Parents have to monitor their children for security reasons

#### E-MAIL

What is e-mail? In its simplest form, e-mail is an electronic message sent from one computer to another. You can send or receive personal and business-related messages with attachments, such as pictures or formatted documents. You can even send music and computer programs.

It can take days to send a letter across the country and weeks to go around the world. To save time and money, more and more people are using electronic mail. It's fast, easy and much cheaper than the using the post office.

Let's say you have a small business with sales reps working around the country. How do you keep in contact without running up a huge phone bill? Or what about keeping in touch with far-flung family members? E-mail is the way to go. It's no wonder e-mail has become the most popular service on the internet.

### Impact on private life

- You can use it to keep in touch with family members who don't live close.
- Requested information can be sent to your e-mail.
- Confirmation for flight bookings can be sent to your e-mail.
- Concert tickets can be sent to your e-mail.

## Impact on public life

- It can be used for business.
- Memo's can be sent to all member of an organisation via e-mail.
- Customers can give feedback on product via e-mail.
- Documents can be sent via e-mail.
- C.V.'s can be received.

## **Advantages**

- It is easy to manage your correspondence.
- It is fast as it saves on the time it take to send letters.

- It is inexpensive-compared to making calls, sending fax or even sending documents by post. Most e-mail service provider give free e-mail and storage.
- It is easy to filter-the subject on an e-mail makes it easier to prioritise your mails.
- It is private-e-mail can only be assessed by the person it was meant for.
- It is reliable-if the e-mail address isn't correct you would be notified immediately. E-mails unlike post rarely go astray.

### **Disadvantages**

- You can get junk mail.
- > Other people can sometimes have access to your private correspondence if they know your password.
- It can't be used without a computer.
- E-mails can't be used in a power cut.
- E-mails can't be used without an internet connection.

#### COMPUTER

A computer consists of hardware and software. Hardware is the components such as the keyboard, screen/VDU (visual display unit), mouse and all the electronic circuitry inside the computer, disk, chips, etc. The software gives instructions to the computers to enable them to perform tasks, often using programmed languages. The type of information processed by computers is called data.

## Impact on private life

- It can be used to keep in contact with friends and family e.g. by e-mail.
- It can be used to shop online.
- It can be used for research purposes.
- It can be used for entertainment purposes i.e. you can listen to music online; you can chat to people online thereby making new friends, etc.

### Impact on public life

- Use in supermarket at cash register.
- It can be used for presentations at work or school.
- Many businesses advertise on the internet.
- More business is now done online.
- It is used in banks.

### **Advantages**

- It is very convenient to use.
- > It allows for spell checks.
- Word processing can be done on the computer.
- It is a useful way of communicating with others via e-mail, IM, chat rooms, etc.
- It is useful for doing business.

### **Disadvantages**

- lt is expensive to buy.
- There is a risk of viruses damaging all your stored data.
- > It can't be used in power cuts.
- It is extremely dangerous to use during a thunderstorm.
- Other people could have access to your personal information.
- It is expensive to maintain.

#### FAX-MACHINE

Fax-machine is short for Estate and Executive. It is a device that can send or receive pictures and text over a telephone line.

The idea of fax-machines has been around since 1842, when Alexander Bain invented a machine capable of receiving signals from a telegraph wire and translating them into images on paper. In 1850, a London inventor named F. C. Blackwell received a patent for a similar machine, which he called a contraction of the called a contraction of the called a contraction.

But while the idea of fax machines has existed since the 1800s, fax-machines did not become popular until the mid 1980s.

A fax machine consists of an optical scanner for digitizing images on paper, a printer for printing incoming fax messages, and a telephone for making the connection. The optical scanner generally does not offer the same quality of resolution as stand-alone scanners. Some printers on fax machines are which means they require a special kind of paper. In discussing the fax-machine I would be talking about a particular model of interest to me, which is the **NEST Rooms**.

NEST (Novell Embedded Systems Technology) Routing; This method of routing is similar to T.30 sub addressing in that the sender enter a fax extension number when dialing the number (i.e. 9268182#215)

### Impact on private life

- You can send document and know instantly that it has being received.
- It is a way of keeping in touch with family.
- You can send your C.V.'s to businesses by fax.

# Impact on public life

- It can be used to send contract to different places.
- It can be used for transmitting hand written notes.
- It can be used for sending resumes.
- It can be used for transmitting illustrations.

## **Advantages**

Does not require manual intervention

No special software/telephone line required

It's 100% reliable (assuming the send enters the extension number).

- Does not require sender to replace fax machine with newer model (Novell intends to sell add-on devices for roughly \$50 which will add NEST routing to existing fax machines).
- > Does not require any special modem or hardware on receiving end
- ➤ Does not require support for anything beyond the basic T.30 protocol (the NEST routing information is carried in the TSI frame)

### Disadvantages

- Requires that sender either have a new fax machine with support for NEST addressing or have a NEST addressing device added to their fax machine.
- Requires that sender knows how to use NEST addressing.

  Widespread acceptance of Novell's scheme is in doubt since it has not been adopted by any official standards body (as has T.30 sub addressing).
- It requires a special phone line from Telephone Company that is more expensive that a standard (POTS) phone line.
- DID line cannot be used to outgoing faxes (requires an additional standard phone line, although a single modem can be shared between the DID and POTS line for both incoming and outgoing faxes).
- Requires special hardware and modem to intercept DID signalling information.