ICT in Retailing
Example 1
Unit 2- Future Fashions Presentation

Report AO2a

Introduction and Project Analysis.

For this project I have been asked to design and implement a system to promote the products of a clothing company called Future Fashions.

There are many methods of advertising including TV and Radio, magazines, newspapers, posters or catalogues and the Internet. However, some of these can be expensive and may not always hit the target audience.

The use of Microsoft PowerPoint to produce a slide show is becoming a very popular and is an inexpensive way to design, create and display information.

Apart from the initial cost of the hardware and software which may be prohibitive to smaller companies, PowerPoint is relatively easy to use and someone with basic ICT skills could produce a quite professional looking presentation.

PowerPoint has a range of features which make it ideal for use as an advertising media as it can combine text, images sound and motion.

There are many other methods I could use to advertise the products of Future Fashions. The most basic way would be posters or flyers and I would not even have to use ICT to produce these. To make the flyers or posters more professional looking I could use a Desk Top Publishing package or a high quality word processing package. These could make my work look more professional.

I could use web authoring software such as Microsoft's Front Page or Macromedia's Dreamweaver.

For the content of my presentation I am going to collect information from a range of sources. These will include magazines and newspapers, catalogues or brochures and especially sites on the World Wide Web as these could contain most up to date information

> **Choosing and Describing Applications including the**
> **Hardware and Software I Have Used**

HARDWARE

There are 2 parts to all computer systems: the hardware and the software. Hardware is the term used for all of the parts of a system you can touch or handle. This will include the keyboard, mice, printers, scanners, monitors and storage devices such as disk drives and CD/DVD Rom. A typical PC set up may look like the following:
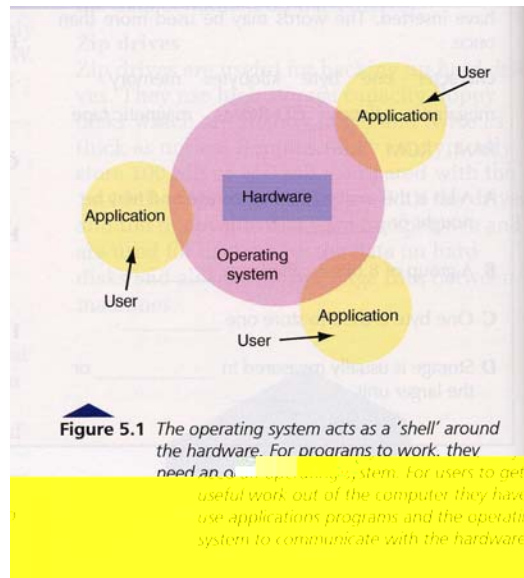

Figure 2.1 *The parts of a typical microcomputer*
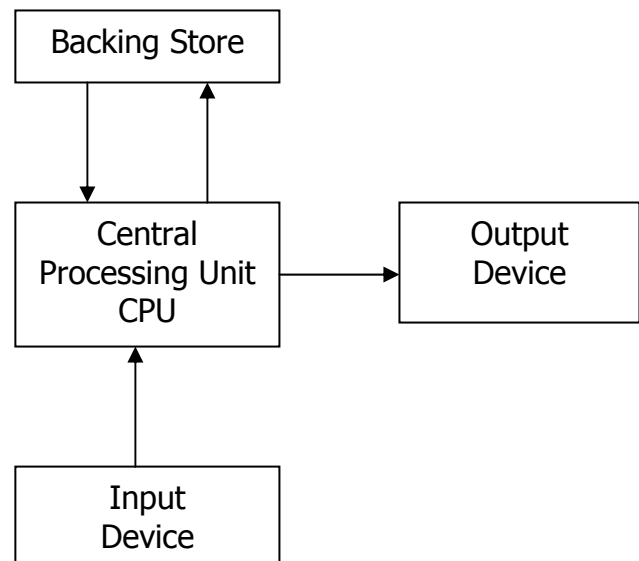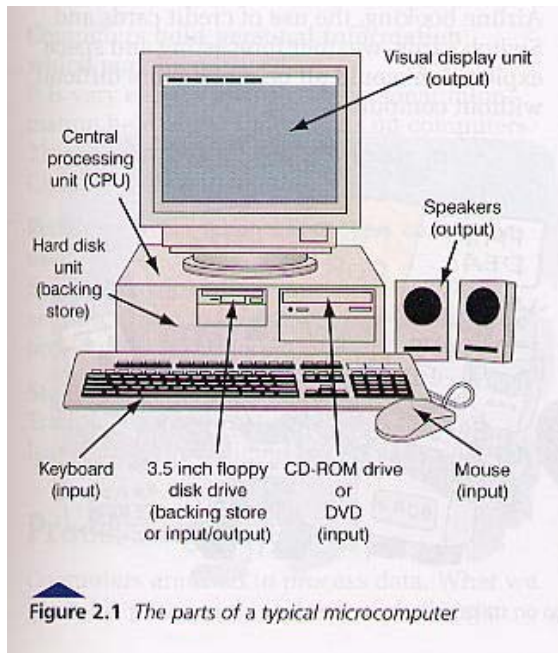
The hardware that is available for me to do this task is a network of RM PC5133 Accelerator Workstations. Each station has 64 megabytes of RAM memory, a 133-megahertz Intel processor and a 700-megabyte hard disk. Attached to this is a standard QWERTY keyboard a 2 Button Mouse and a 14-inch colour monitor. The network in this room is connected to a Brother 1450 laser printer. Each station has a set of headphones to allow me to listen to sound and music files. As a user of the network I have been allocated 30 megabytes of disk space to save my files to.

The hardware I have used, although basic by today's standards, was more than adequate for this task. Newer systems will have faster processing speeds such as the Intel Pentium running at 3.2 gigahertz, larger ram memory of 512 megabytes or ever 1 gigabyte, bigger hard disk capacity now up to 140 gigabytes, larger monitors 17, 19 or even 21 inch, newer TFT screens are slimmer and give excellent resolution. New type mouse with the scroll wheel, this is good for scrolling up and down large documents or browsing web pages or sites. Optical mice are better as they don't have a ball and therefore less moving parts to wear out or get clogged up. As the price of technology has fallen the use of cordless mice and keyboards allow desktops to become free of leads, although there is no benefit as far as speed or accuracy is concerned. The printer in this room is a laser printer and gives very good quality black only print. However, for this system the presentation is shown on computer screens or projected onto large screens.

SOFTWARE

Software is the general name given to all of the programs that can be run on computer hardware. There are 2 main categories of software: Operating or System Software and Application Software.

Figure 5.1 *The operating system acts as a 'shell' around the hardware. For programs to work, they need an o... ...stem. For users to get useful work out of the computer they have use applications programs and the operating system to communicate with the hardware*

The operating software that was available to me on the network was Windows NT4 and this had the Windows 98 interface. This operating system basically controls the hardware and software. It does things such as manage the files, control the hard, floppy and CD Rom drives, also the mouse and the printers.

The Windows 98 desktop is what is known as a GUI or a Graphical User Interface as it uses graphics or icons that are used for commanding the computer to perform tasks. This is good for allowing me to open and manage applications I can place regularly used icons on my desktop and it helps me to organise my files into different folders for different subjects.

To create the system I have available to me a good range of application software these include Microsoft Office 2000. This is a suite of programs which includes Word, a word processing package. Excel which is a spreadsheet package this also has database functions. Access which is a relational database. It has Publisher, a desktop publishing package and PowerPoint which is a presentation package. This is an excellent package of programs with a huge range of features which are all compatible with each other. This is very good for sharing data and information.

CREATING THE SLIDE SHOW

To create the slide show I have used Microsoft PowerPoint, which is presentation software. Firstly I set up a slide master this allows me to keep all of the formatting of each slide the same. It will be set to show information on every slide I create. For example I would add the company name and the logo. Set the slide colours and backgrounds add any names and dates etc. I can set font sizes, types and colours this is very useful if an organisation conforms to a house style.

Once I have created my slide master I can then begin to add the information to each of my slides. This information can be in the form of text, images, sound and even full motion video although higher specification hardware would be required to view this.

Once all of the slides are complete with the information I require I can then add the slide transitions and builds. These features allow me to add movement and sound effects to individual slides and to the components of each slide i.e. the images and text frames etc.

Report AO1d/e

Comparing the Use of Input and Output Methods and Devices

INPUT DEVICES

When designing any information system, I need first to consider what information I want to get out of the system. The output depends on the type of job (application). If I were considering a very basic system I could decide to use a visual display unit (VDU) and a printer for the output. For the input I would use a keyboard. This is only one solution. I should look at other alternatives so that I am able to choose the best one.

Input devices are used to get data into a system. The ideal input device would be able to get data into a system as accurately as possible, in the least amount of time and preferably without human intervention. The device would also be relatively cheap. Unfortunately, no perfect input device is available and the choice is always a compromise. The fastest input devices are suitable only for a narrow range of applications. Here are some of the main input devices in use today.

Keyboard	**Mouse**	**Tracker ball**	**Touch Sensitive Pad**
Joy Stick	**Light Pen**	**Touch Screen**	**Barcode Readers**
Magnetic Strip	**OCR/OMR**	**MICR**	**Microphone**
Scanner	**Digital Camera**	**Web Camera**	
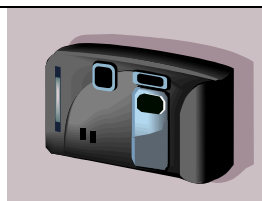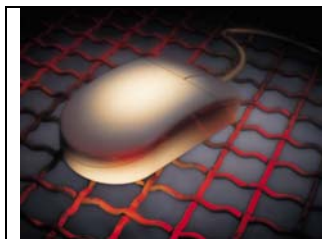
The input devices available to me are keyboard and a 2-button mouse.

The keyboard: is the oldest and most familiar of all input devices. Keyboards are intelligent devices and contain their own chips. Basically each key acts as a switch that closes when the key is pressed. The micro-processor scans the keyboard hundreds of times a second to see if a key has been pressed; if it has, a code that depends on which key has been pressed is sent to the processing unit. The CPU translates this code into an ASCII code (the code that computers use to represent characters on the computer keyboard), which is then used by the computer program. A standard keyboard is called a QWERTY keyboard because of the arrangement of the letters of the top row of the

alphabet keys.

As an input device the keyboard has to be one of the least efficient methods of entering data. Depending upon the operator's skills inputting information can be very slow and can be the main cause of the 2 most common types of error:

The Transcription Error: These usually occur due to misreading or the mistyping of data. This can be caused by poor handwriting or the confusion between characters i.e. the letter S and the number 5 or the letter O and the number 0.
The Transposition Error: This occurs when 2 letters or numbers are reversed for example to becomes ot or more commonly numbers are transposed i.e. 2142 may become 2412. Research has shown that 70% of errors which occur in data entry are transposition errors.

Most software today have tools such as spelling and grammar checking which will identify some errors but proof reading and double checking are the best way to ensure data from a keyboard is entered correctly.

A Mouse: is the input device that translates its movements on the desktop into digital information; this is fed to the computer, which in turn causes the cursor to move on the screen. Underneath the mouse is a ball that rotates as the mouse is moved on the desk, and sensors pick up the movement. Mice usually have 2 buttons to make selections or invoke menus and a wheel that can be used to scroll up and down pages.

Candidates can discuss and compare some of the other input devices listed above. Areas of speed, validation, cost and accuracy must be considered.
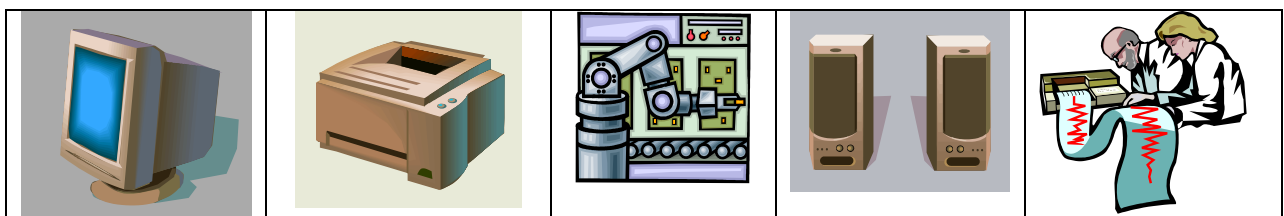
OUTPUT DEVICES

Output devices provide results in a suitable form after data processing. In most cases this will be in the form of a printout or displayed on the computer screen. This can be in the form of pages or in an animated presentation. The widespread use of electronic mail means that output is now in the form of an electronic message which can be sent to other computers.

There is a range of output devices available today, these include:

| **Visual Display Unit (Monitor)** | **Laser Printers** | **Inkjet Printers** |
| **Voice Output** | **Robots** | **Electrical Signals** |

Within this classroom I have the following output devices available to me: A 14-inch colour monitor, and a Brother laser printer. A larger monitor of 17 or even 19 inch would be better as it will display more information. The laser printer gives very good quality black only print. For the production of employee payslips black and white is suitable, also, colour

printing can be slower and is more expensive compared to laser printing especially if a company has a high number of employees.

Candidates can discuss and compare some of the other output devices listed above. They must comment on alternative output and drawbacks.

Report AO2b

There are 2 types of documentation **User** and **Technical.**

Technical Documentation is used to explain a system to a specialist i.e. a programmer or systems analyst. The guide will use specialist or technical terms. This will be used when the system is upgraded or if a new member of technical staff needs to understand the current system.

User Documentation is a manual or a set of instructions that a user, such as a member of the office staff, can turn to for learning new procedures or to deal with a problem that may arise. Good documentation should include the following:

- **Step-by-Step Instructions with examples, using Screen Dumps**
- **How to Load the Software**
- **How to Perform Functions**
- **How to Save and Print**
- **Exercises to allow the user to practice and understand the system**
- **What to do if Problems Occur such as not Printing or Saving**

The user guide I have produced works quite well and someone who has knowledge of a similar type of system would be able to use it using these instructions. However, I could have made it a lot better by including screen shots so a user can see if they are on the correct track. For example

**Click Start
All Programs
Microsoft
PowerPoint**

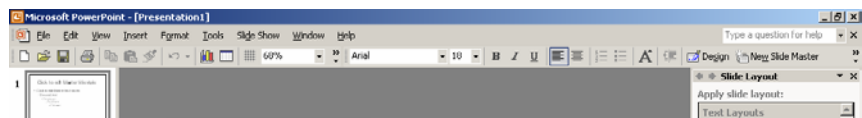**Click View
Master
Slide Master**
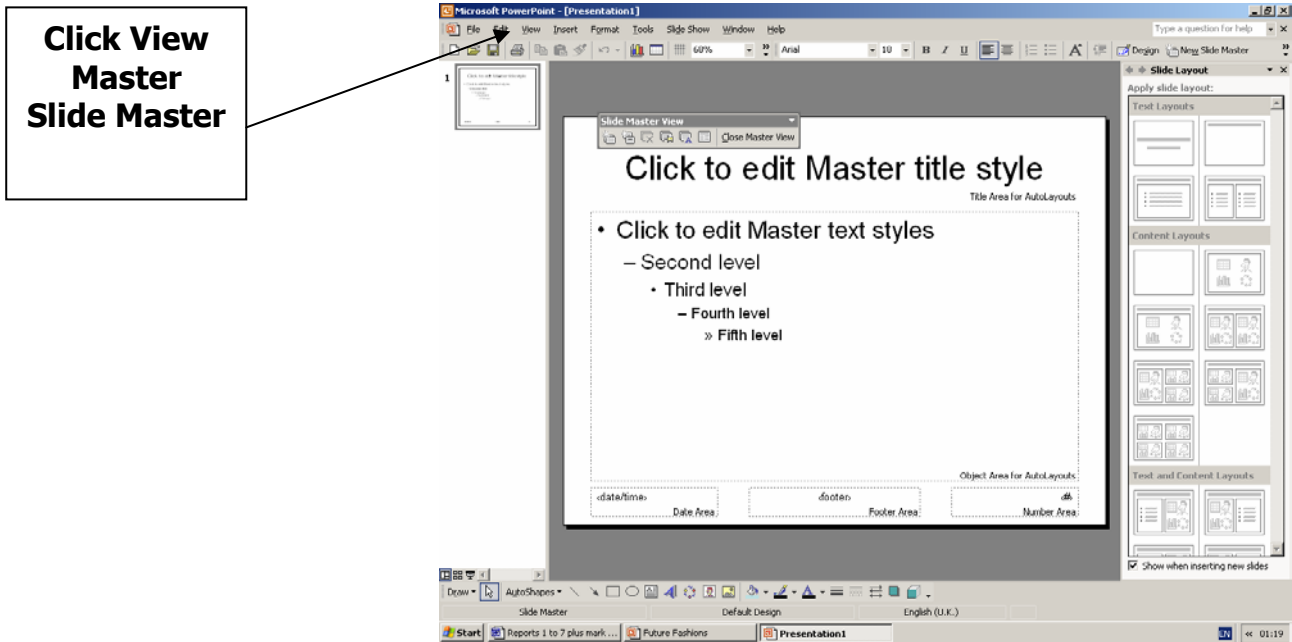
This is a very effective way of showing users how to use the system and carry out tasks.

I could have added small exercises to remind the user how to perform basic functions such as:

Which icons on the toolbar, below, are used to save and print your work?

My user documentation does not have a trouble-shooting guide. This is a section which helps the user to overcome any common problems which may occur, for example:

PROBLEM	POSSIBLE SOLUTION
My Slide Show has not printed	Check the Printer is: Connected, Switched On, On Line and that there is paper in.

If the user cannot rectify simple problems like the one above then there should be a name or contact number to allow the user to gain further technical assistance.

TRAINING FOR NEW WORKING PRACTICES.

It is very unlikely that in a large organisation, that any new system would be introduced without some form of staff training. This could be done "In House" where training officers will come to the user and teach them how to use the system individually. Staff from a number of the departments may go to Head Office or possibly a training agency to be

taught as a group. Each method has its benefits in terms of time, cost, effectiveness and the sharing of skills and ideas. The documentation would be used as a reference for the new user until he or she is totally familiar with the new system.

Report AO3

How has the Use of ICT Benefited My System?

THE MANUAL METHOD

I did not have to use any form of computer or ICT equipment to do this task, as it could have all been done by hand. I could have just used paper and coloured pens, paint or pencils to create posters.

THE BENEFITS OF ICT

The use of ICT is of great benefit for this type of system as once the details are created for the first time they can be used over and over again. This can be done by saving the original slideshow then recalling it each time it has to be used.

The slideshow can be updated easily by adding, removing or changing information. No need to start all over again each time no need for a rubber or correction fluid if you make a mistake or want to delete information. I have the use of tools such as spelling or grammar checking, I can easily experiment with different size and shape of typeface, I can use colour, clipart, borders, word-art, tables and frames to make the slide show more attractive

ICT has made great steps in the communication of information files can be sent and received by e-mail instantaneously. Data can be passed around a network for other users to access or the system could be placed on a disk or CD-rom and used to keep safe or to pass to other places or sites.

THE DISADVANTAGES OF ICT

The use of ICT has revolutionised working practice and many organisations would not be able to do what they now do, or offer, without the use of ICT. However, the use of ICT does have its disadvantages:

- Computers need electricity to power them, so power cuts can halt work.
- Computers have the tendency to "crash" or lock up, and data is lost if it is not saved.
- Data can be lost if disks or files get damaged or corrupted.
- Data can be changed or deleted easily or accidentally without trace.
- Viruses are becoming an increasing source of data corruption.
- Accessibility and the sharing of data electronically can make information less secure.
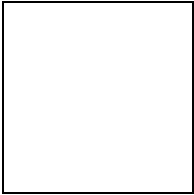
Certain files are only compatible with certain software.
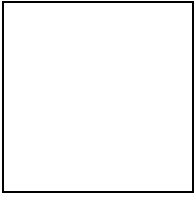
Staff have to be computer literate or be trained to use computers.

APPRAISING MY SYSTEM

The system I have designed works well and will be an effective tool for the person having to carry out this sort of task. This system can certainly be expanded upon in the following areas:

Rather than an ongoing show where information is given in sequence I could have added links between the pages similar to those used in web site design i.e. Click here to go to Footwear page. These can be set up very easily and would allow viewers to navigate to the pages which interested them.

The use of full motion video would be an option for an organisation with high specification hardware, video of production techniques or models showing off the range of products could be added

Instead of viewing the slide show on a stand alone PC I could play it through a projector onto a large screen for greater impact on the target audience.

Report AO4

The Social, Economic, Legal and Moral Effects of ICT

Computers have, and will continue to revolutionise every aspect of our day-to-day living. If you try to imagine life without ICT and the benefits it has brought you would need to go back to the time before the Industrial Revolution when mankind did every task by hand with the help of animals and the tools that he had to make himself.

The use of ICT has made massive improvements to our lives, and has done a lot of good for mankind. However, the use of ICT does have its downside.

In this report I am going to look at the positive and negative effects of ICT in view of its social, economic, legal and moral implications.

Socially, the use of ICT has brought great advances within the world of communications. It is now possible to contact friends and relatives all over the world using land or mobile telephone, SMS or text messages, E-Mail, in chat rooms or with the use of video conferencing. It can be said that the use of new communications allows us to stay in touch very easily.

It is possible for many of us to gain access to information. Instead of going to libraries we can use interactive CD ROMS or we can access the Internet. Adults and children can learn on-line and be assessed on what they have learned, then receive their qualifications. It is possible to shop on-line now, not just for clothes and electrical goods but also for the weekly food shopping.

With the advent of satellite television for sports and movies, video, DVD and computer games consoles people can receive all of the entertainment they want. Tele working now allows employees to work from home using computers linked to the Internet. So now it is possible to carry out your whole life, virtually, without leaving the house.

Is all of this use of communication technology a good thing? Do humans need to interact with each other face to face? Can you imagine a life where you never have to leave the house?

What about the negative side of the Internet, access to information which is illegal in Britain. Sites that contain pornographic, racist and violent content are open to people of any age. Is this appropriate? People who use chat rooms to contact adults or children for immoral purposes.

Modern technology has made vast improvements in the community with its use in the Police Force for the prevention and detection of crime. Information about all known criminals and offences in Britain can be accessed from a computer in any Police station. Computers are used for fingerprint identification, matching DNA and examining other evidence collected from a crime scene. This makes the job of the detectives much easier and more crimes are solved and at greater speed. Closed Circuit Television (CCTV) is now used in most city centres and in many local communities for the protection of people and properties. CCTV helps to deter crime and helps with the identification and capture of criminals.

Do the police only hold information on criminals or do the have access to information for everyone in the country? If they have information about you is this good or bad? Is the use of CCTV good or are we becoming a "Big Brother" society where all of our movements are watched?

The use of ICT has brought huge developments in medicine without the use of computers advances in the treatment of terminal illness would not have been made. The development of drugs for the treatment of illness may not have been possible. New operating techniques would not be possible. The use of ICT for all of the above has saved and improved the quality of life of people who become ill.

The use of ICT has made it possible to change the way plants and animals grow and develop. Computers allow us to genetically modify things and cloning or duplicating is now

possible. At the moment it is illegal in Britain to carry out genetic engineering and cloning on humans.

Is this use of technology in this way a good thing? Are we interfering with nature? What are the ethical or religious arguments? Should cloning be allowed?

The use of ICT has revolutionised the way we work. Most organisations and businesses would not be able to function at all if it were not for the use of computers. Computers can make life so much easier and quicker, which means that less staff are required. Robots can do the work of people in manufacturing industries such as car production.

What are the negative effects to ICT in the work place? Are jobs better or worse? What about peoples' livelihoods? Can all people use modern technology? What happens if they can't?

Companies have found that the use of systems such as the one I have created greatly reduce the amount of work which they have to carry out. I feel that there would be very little difference between my system and a commercial one and feel that it could be used very easily in any organisation that have a large staff turnover.

Presentation Evaluation Sheet 1

How Did You Create Your Presentation?

What Hardware Did You Use?

What Software Did You Use?

How Would You Do The Task In A Different Way?

What Other Hardware or Software Could You Have Used?

How Well Did This Task Work?

Presentation Evaluation Sheet 2

How Did You Gather the Data?

Why did you use PowerPoint for this task?

What is a Slide Transition? and How did you create them?

What is a Slide Build? and How did you create them?

What Other Functions Could You Have Used?