

RIVER CHING SPORTS CENTRE

REPORT



The River Ching Sports Centre is a new Sports Centre in Waltham Forest. It is an organisation that uses I.C.T, which consists of five departments;

1>Marketing

2>ICT

3>Finance

4>Administration

5>Human Resource

(1) Marketing Department

This is the department where it is uses ICT for advertisement.

~~Yacwae~~; The marketing Department deals with only one computer. A vital part of ICT is for computers to send data to the computers, peripherals and control devices. There are a number of ways in which this data can travel, which is through the Input and Output devices.

Input

The need to capture data quickly and accurately has led to wide range of input devices. These input devices make use of human touch, light magnetism, sound and control sensors. Each type of input device has been designed for a specific purpose.

An input device would include devices such as the;

. **Keyboard**, which is the most common way of entering data into a computer. Each key is connected to a switch, which closes when the key is pressed. This sends a signal to the CPU based on the character's ASCII code. In comparison with other input devices, entering data using a keyboard is quite slow, even for touch-typists who have learnt to type using all their fingers and thumbs without needing to look at the keyboard.

Another input device would include the;

. **Mouse**. Most people find using a mouse easy. The pointer on the monitor screen mirrors the movement of the mouse by the users hand. Under the mouse is a ball which rolls as them mouse, one shaft records the movement in the north-south direction and other shaft records the east-west movement. There are usually two r three buttons. When the cursor is over an icon, menu item, or the edge of a picture, the mouse buttons can be clicked or double clicked. The button also can be held down to drag something across flat surface.

Thirdly, another device would include;

. **Scanner** is another input device where Scanners can convert images into digital data. A scanner works a bit like a fax machine. A scanner enables both pictures and text to be input to a computer. Sometimes special software is required to scan text in order to recognise the words and letters (OCR).

Finally, a device called the

. **Graphics tablet** is a device, which is a flat pad, which helps the marketing department as it is used to draw on with a device similar to a pen called stylus. A graphics tablet makes drawing easier and much more accurate. They are just like pen and paper, and they are made of a touch-sensitive membrane. They are very helpful towards the marketing department as they can be used for designing advertisement.

Process Devices

Processing device are devices, which doesn't need human operations. (They are known as process control), which means using sensors, computers, and automated devices to control an industrial process, nevertheless people still need to check the if the computer works properly. Like many other computerised systems, process control is potentially more efficient than humans, but entails precise programming and is very expensive to install.

They include:

. A **Video Digitiser** is another input device, which enables video signals from a standard camcorder to be displayed in a window on the computer screen. Video Sequences can be stored on the hard disk of the computer and used in other computer programs. This is called image grabbing. The technique is used to make special effects in music videos and cinema movies. Last but not least,

. A **Network Cards** are another use of input device where in order to connect to a local area network the computer must have a network card fitted. These cards slot into the main circuit board at the back of the computer enabling data to pass between the computers a network cables. Each card on the network has a unique electronic 'address' that ensures data is delivered correctly. The typical speed at which data is transferred across the network Cards is 100mbps although 10 mbps is still used on older networks. A network card is a good device, which helps the River Ching Sports centre to communicate as it helps other to transfer data to other computers and ensures that data is delivered correctly.

To conclude, a device called the:

. A **sound card** is a small chip, which slot in the computer for sound. Sound can be recorded digitally and stored as data; it can also be processed and output through a speaker. .

Output

An output device is any hardware used to communicate the result of data processing carried out by the CPU. The results of processing are passed to output devices. The most common output devices are the computer monitor and the printer. Output devices are considered as visual, printed, sound and control.

An output device would be

. A **Monitor**, the computer monitor, screens, or VDU is the most common output device. They are used when visual information is needed but a permanent record isn't. There are two ways monitors differ from each other –Size? And resolution?

Computer Monitors are very similar to the TVs in many ways. They use cathode ray tubes (CRTs) containing an electron gun at the back of the tube which fires electrons, the phosphor dots to glow to give colours.

Another output device would be

. A **Printer**; which are used to produce a permanent hard copy of the information on paper. The River Ching Sports centre mainly use a laser printer. There are three main types of printers. Dot-matrix Printers, Laser Printers and Ink jet printers.

Laser Printers – are called page printers, because the data to be printed is sent to the printer in complete pages-one page at a time. They work on the same principle as photocopiers. Lasers are very quite printers and give high quality print, which is also an advantage in the marketing department.

The majority of laser printers are sold black and white, however colour laser printers are falling in price and becoming more popular, so this will also be another very good advantage for the marketing department as this would mean they could advertise they company, making the company look much more attractive and more of a pull factor. The laser printers are much more suitable for the marketing department as although they are quite expensive to buy, they hold their price as they produce high quality documents rather than a dot-matrix printer which is much more cheaper in price and in quality, there print quality is too poor to produce presentation documents and only produce black and white printing and also they are very slow, which in business is big disadvantage, lastly they are very noisy which means they cannot be used near a telephone.

There are other devices such as **Plotters, Sound/voice, LEDs, Switches and lastly Actuators.**

SOFTWARE:

Software is the general name for programs that are suitable for a range of purposes, from writing a letter to controlling a set of traffic lights. There are five particular software applications that are used widely in business.

The marketing department uses. ~~Desktop Publishing Software package (DTP)~~

. ~~Word processing Software Package~~

. ~~Graphics Software Package~~

. ~~Browser Software Package~~

. ~~Web Authoring Software Package~~

Desktop Publishing Software package (DTP)

DTP program allows users to look at the page of the document as a whole and design the layout by marking areas for text and graphics. DTP software is used to build professional looking pages-ones that are good enough to be published. This is one of the best packages used for the jobs the marketing department does.

Examples of documents produced using DTP software include newsletters, newspapers, leaflets and posters but there are loads of others aswell The DTP software usually lets the user create text and simple pictures-but is often works best when the source material is created in other specialized software. (E.g. a word processor or a graphics package) and then imported into the DTP package. The DTP has three main benefits for the marketing department as you can create very professional-looking documents even with relatively inexpensive DTP packages. But the quality of the printed document is often limited by the quality of the printer. The layout of the document can be changed more easily using a DTP than a word processor. And lastly the user can control the number of pages more easily than when using a word processor. If there are too many words for a page in word processor, it will normally create a new page automatically-however the DTP software will usually just not display the text. A DTP also has pages, which are built up as series of

frames –text frames containing text, graphics frames containing images and so on. It's the Frames that really make the DTP software more powerful than a word processor for some tasks.

Word-processing Software Package

A Word processor can be used to write letters, reports, essays, projects, memos, curriculum Vitae, theses- in fact, any form of written. Word Processing actually does more than he name says.

A Word processor is a one of the other best packages the marketing department uses, as it includes four benefits such as written documents and documents produced using a typewrite share the same problem-once created they cant easily be altered. Word processors changed all that, and other things too... as text can processed easily, appearance can be changed (text formatting) and content can be changed too (text editing). The text can be saved and reused, also professional-looking documents can created as you can improve the appearance of document with graphics and ex-tensions.

This sort of package is very useful for the marketing department nevertheless there are more advanced features in word-processing, which include;

- > ~~Readers~~ **Readers**, (good for multi-page documents)
- > ~~Search~~ **Search** (enables you to find specifies words etc.)
- > ~~Self-Correction~~ **Self-Correction** (help to improve the quality of your written communication)
- > ~~Merge~~ **Merge** (lets you send personalised letters combining standard letters)
- > ~~Templates~~ **Templates** (often used for business documents)-*very good for marketing
- > ~~Macros~~ **Macros** (to run routine operations-sequence of commands-much faster and easier)
- > ~~Import~~ **Import** (import information from other applications)

Graphics Software Package

You could draw simple images using a word processor, but for exceedingly looking results, you need to use graphics software. There are different types of images and how they can be created. Images are stored as either BITMAP or VECTOR data.

There are two types of graphics software, which the marketing department use for a much more complex- quality image, which makes advertising much more striking aswell as very challenging, creating lot more of a competition around them.

- The two types are 1) **PIXEL-BASED** software (painting)
2) **VECTOR-BASED** software (drawing)

The **PIXEL-BASED** helps to edit images, which u basically alters each dot individually. This file is called a ~~img~~ **img**.

The **OBJECT-BASED** helps to edit manipulating objects. Where you can stretch and twist them, colour them and a lot more with the series of tools.

The marketing department can also input existing images, or even create their own.

Lastly, Graphics software could even use computer-aided design (CAD). The CAD is used by manufacturers and engineers to create computerised designs of objects which they will then build a CAD is usually vector-based software.

(2) ICT Department

This is the department where it uses the whole system to process in the sports centre

~~Yadwae~~: The ICT department deals with two computers. One is called the file server which is the main computer connected to the server, which can control what the other computer can do, and stores all records from the other computer. And the other computer is used for the own records and own databases, which is connected to the file server.

Input

An input device is any hardware, which is used to enter data into the computer system. An input device would include devices such as the **Keyboard**, which is the most common way of entering data into a computer. Another input device would include the **Mouse, scanners, an OCR, OMR, Video Digitiser, Speech or voice input, MIDI, and lastly LDRs.**

A storage device retains its contents when the computer is switched off and is used to hold programs and data. All computers have some form of hard storage. The ICT department uses the backing storage (also known as the secondary storage), which is any data-storage area outside the CPU.

The main type of storage used in the ICT department is

The **Hard Disk**, which is the main internal backing store. They are a common form of data storage which are usually found inside computers., which can b used on both, s ~~ee one~~ and ~~to work~~ ~~comp~~. Each hard disk which is used in the ICT dept' contains a lot of concentric tracks, where these tracks are divided into sectors. The data is then stored into those sectors. Moving directly to data on a disk drive is called random access, which might occur at times. Most disks will be able to store data on both sides.

The main benefit of the hard drives for the ICT department is that they have a pretty large capacity, and is now common in a desktop.

Another type of storage that the ICT department uses is

The **floppy disks**, which are a common external backing storage. They are very useful for transferring data between computers and for keeping a back up of work files. They help the ICT department, as they are very protective, as they can read/write heads access the disk through holes in the protective sleeves, furthermore they are disk read-only which helps to reduce the chances of data being accidentally overwritten and lost. They are small and portable, where data can be transferred between different computers.

For the ICT department, they need a drive, which can read data from a disk. The ICT department uses floppy disks and CD-ROMS as thy have a longer access times than hard disks.

Additionally, **Compact disks** are also used, as they hold large quantities of data in the form of text, sound, still pictures or even video clips.

CD'S can be now available in three forms;

- 1) **CD-ROMS**
- 2) **CD-R**
- 3) **CD-RW**

The ICT department use the **CD-ROMS**, as it is a read only memory. In other words, you can only read from the disc, not write or store data onto it. This type is the most common sort of CD available and is the way most software programs are sold. It is a memory storage device but which would not be considered as a backing-store as the user cannot write to the disk.

A **Network** is a two or more computer connected together. Computers in a network can communicate with each other. The computer needs a network interface card to connect to a network.

The ICT department are a part of the LAN network (local area network), which is a network that you see in most offices and schools. LANs are small, local networks.

They usually need the following hardware in order to operate;

- . A **network server**, which is a dedicated computer, that runs the software needed by the network and stores the files that users have created.

- . **Terminals** are individual workstations that give access to the network. Using a terminal gives access to the networks software and files.

- . **Print server**, this is when a group of terminals share use of a printer then the system needs a print server.

For the network to operate, data needs to be sent to and from all parts of the network. This can be done using wire cables or fibre optic cables, or via radio signals.

The ICT department also uses the **STAR NETWORK**, which gives access to a central computer.

Star networks are used when a large number of workstations need to be connected to a central computer such as the mainframe. Each workstation is connected directly to the central computer.

There are few advantages, such as performance in one part of the network is unaffected by events elsewhere, also cable failure is less of a problem which doesn't affect other users.

The department includes;

- . A **Video Digitiser** is another input device, which enables video signals from a standard camcorder to be displayed in a window on the computer screen.

- . A **Network Cards** are another use of input device where in order to connect to a local area network the computer must have a network card fitted. These cards slot into the main circuit board at the back of the computer enabling data to pass between the computers a network cables.

These types of networks and cards are very helpful towards the Riverchng sports centre, as they include many functions and allow many jobs to be taken place very easily and efficiently.

And lastly it makes working much more faster, and complex so that the work can be done to a greater standard and of higher quality.

The ICT DEPARTMENT, use colour laser printers. .

Colour Laser Printers – are called page printers, because the data to be printed is sent to the printer in complete pages-one page at a time. They work on the same principle as photocopiers.

Lasers are very quite printers and give high quality print, which is also an advantage in the marketing department. The majority of laser printers are sold black and white, however colour laser printers are falling in price and becoming much more popular.

This type of Printer helps the RiverChing Sports centre to communicate and function properly as it enables you to print out work of colour for better perceptive, or even just for simple reasons.

SOFTWARE:

The ICT department has all software's that all other departments include, such as

- . ~~Desktop Publishing Software Package (DTP)~~
- . ~~Word Processing Software Package~~
- . ~~Graphics Software Package~~
- . ~~Browser Software Package~~
- . ~~Web Authoring Software Package~~
- . Spreadsheets
- . Database Publishing

They all operate ~~on~~es, such as print manager, and virus-scanning software.

(3) Finance Department

This is the department where it uses ICT, for buying equipment, and sorting out wages, and receipts.

Software:

The hardware department only has one computer, which deals with all financial issues.

Input:

An input device is any hardware, which is used to enter data into the computer system. An input device would include devices such as the **Keyboard**, which is the most common way of entering data into a computer. Another input device would include the **Mouse, scanners, an OCR, OMR, Video Digitiser, Speech or voice input, MIDI, and lastly LDRs.**

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Administration

This is the department where it uses ICT, for the Receptionist, also dealing with photocopying and even filing.

Human Resource

This is the department where it uses ICT for personal recruitment and training , health and safety and lastly pensions.