# Portfolio 1 – Business Systems
# Section A – Investigation of Two Different Organisations' use of ICT

## Introduction

In this section of our portfolio we will be investigation how two different organisations, Babcock Infrastructure Services, and Thorpe Park, use ICT in their business. I will be writing a report that investigates the use of ICT in these businesses and will be comparing the two business and analyse how different companies use ICT differently.

# Organisation 1: Babcock Infrastructure Services

## Babcock Infrastructure Services overview

The organisation that I attended for my work experience, which took place over two weeks, was Babcock Infrastructure Services. They are a group of engineers and architects who specialise in the design and construction of offices and schools. The offices are situated in West Ealing and are responsible for the construction and improvement work on many of the schools and offices in the area. They fund themselves and earn their own design and construction contracts, and when I attended I worked in the design section of Babcock which is concerned with the design of buildings. I particularly worked on a school project in which building a new school from scratch.

## Using ICT in Babcock Infrastructure Services

The employees at Babcock Infrastructure Services use ICT in many different ways, and it is a big part in the everyday running of the organisation. Computers are used for designing purposes, creation of work related documents and communication with clients.

# Software used in Babcock Infrastructure Services

Mechanical and structural engineers in the organisation use AutoCAD 2007 to design the basic structure and mechanics of buildings, finding out the area of rooms and sizes of specific features being used such as floor type, wall type etc. This is the main software which they use and is required for their job. Employees communicate with each other via email and Intranet to discuss drawings and projects, and to swap ideas. Intranet is also used by employees to access information on the organisation and its past and present projects, and on other staff within the organisation. They also use email to communicate with clients about related projects, such as to discussion over designs and structures of buildings and refurbishment ideas. Computers are also used to create letters for clients, such as cover letters given with issued design proposals and drawings, and memos for other staff that discuss important topics such as project briefs are also made. Reports are also created to keep track of progress of current projects. An example of this is a register of drawings, which keeps track of which drawings and designs are issued to which people, so they know who's got what.

**Software Systems used:**

- Windows XP
- Microsoft Office 2003
- Time Sheet Professional
- Microsoft Outlook (email)
- UIS 2006
- AutoCAD Release 2007
- Team (LBE)
- Scale
- Ripac
- AutoCAD LT00
- MS Project 01
- Technical Indices
- TREND (LBE)
- NBS Specification Manager
- NES Specification Manager
- HEVACOMP

# Hardware used in Babcock Infrastructure Services

The hardware which is used in Babcock includes computers, scanners, photocopiers, digital cameras and printers. Computers are the main type of ICT used in Babcock, but scanners and digital cameras are also used to scan in images and to include real life photos of current constructions. Printers are used to print out letters, reports and memos and a photocopier is widely used to make copies of drawings for issuing to different people, for future reference and editing. A special A1 printer is also used for construction and mechanical designs that have to be big to include all the specific details, which are usually made my Structural and Mechanical Engineers on AutoCAD.

**Hardware Components used:**

- Dell PC in which the computer is run
- Dell Monitor to see what is being doing on the computer
- Dell Keyboard to input information
- Dell Mouse to access the screen on the monitor
- Dell Speakers to hear sound
- Hewlett Packard and Epson Printers to print out work
- Hewlett Packard Scanner to scan in images
- Olympus Digital Camera capture and use photos of real-life construction sites in work
- A1 Printer for printout of structural and mechanical designs
- Photocopier to copy drawings and documents for editing, handing out and future reference

## What data is being processed by the organisation?

The data that Babcock processes involves various information about a wide range of buildings. This includes the design of the building, structural and mechanical engineering of the building and refurbishment ideas for the building. Employees who visit clients and building sites to take notes and pictures gather this data outside of the organisation; this is then given to architects that use it when designing and producing documents such as design briefs.

## How the software meets the organisation's needs?

The organisations needs are met by the software used in many ways such as AutoCAD 2007 being used to design basic structures and mechanics of buildings by structural and mechanical engineers. The use of CAD software is also used for measurements, areas, specific features e.g. Floor Type, Wall Type etc. which can all be presented in a more simple and easy way in comparison to hand drawings. With the help of CAD, the drawings can be saved on the database and easily accessed again at any other time, while hand drawings have to be stored in folders, which can be inconvenient. CAD can also be used to create 3-dimensional "solid" models which can be rotated and viewed them from any angle. The computer can also perform calculations for you and the designs can be created on screen. The designs can also be accessed using CAD and can be sent anywhere electronically, and changes can be made straight away. Microsoft Internet Explorer used for employees to communicate with each other and with clients via email. Microsoft Office 2003 used to create letters for clients and memos for other staff. Reports are also created to keep track of progress of current projects. Time Sheet Professional used to create time sheets to keep track of employee shifts and working hours.

# Organisation 2: Thorpe Park

## Thorpe Park overview

The organisation that I attended with my school for a trip was Thorpe Park. They are an amusement park specialising in providing enjoyable rides and shows. The amusement park is situated in Surrey. They provide a service with many rides such as, Stealth, Colossus and Nemesis. When I visited I investigated into the ways they use ICT aswell as test riding some of the rides available.

## Using ICT in Thorpe Park

ICT is used in many different ways, such as powering the rides, security, management of finances, records of numbers of people entering, advertising and provides the availability to find information and booking online.

## Software used in Thorpe Park

They use multiple types of software such as email to communicate with customers about information, complaints, promotion offers etc. This is important to the business as it helps them attract and keep customers happy. They also use a database software called Oracle Database which keeps information held and secure, taking respect in customers privacy and can be used to analyse customer data and sales. GCI Imagery is used to alter adverts used on TV. They change things such how the ride appears with a person riding on it, their face expressions and sound affects used to again help with attracting customers. Computer Associate has been used to back up all the files and information on the computers in case of accidents occurring involving work getting lost. FDII is the main software used in the organisation helping control information and how it is run.

**Software Systems used:**

- Windows XP
- FDII
- GCI Imagery
- Microsoft Outlook (email)
- Oracle Database
- Computer Associate

# Hardware used in Thorpe Park

The hardware which is used in Thorpe Park includes CCTV, which is linked to computers watched by employers to ensure safety of all the customers and to be aware of the going on around the park. For communication between staff members radios have been used when in the middle of the park, they are quick and easy to use. Instead of using a wireless internet connection telephone ISDN is used to store messages from unanswered calls and to find out what days and times the park is getting most of their business at. They also use barcode scanners at entrancæs to see how many people enter the park and the specific times so they know how to control their price plans etc. Ticketing machines are used in the offices to produce tickets for customer's entry aswell as computers which shows all the pricing plans available. Proximity detectors are used on the rides to ensure safety and enjoyment for the customers. Before a ride starts Seat restraints are activated to again ensure the safety of the customers riding on the rides. Speed Control is important as it controls the speed at which the rides run at. Pictures are captures by digital cameras and scanners to make copies of the pictures taken. The pictures which have been taken are then printed off and can be used as an advertising product, or for the customers help as leaflets.

**Hardware Components used:**

- Telephone ISDN
- CCTV
- Digital Cameras
- Barcode scanner
- Radios
- Seat Restraints
- Ticketing machine
- Basic computers
- Scanners
- Proximity Detectors
- Printers
- Speed control

## What data is being processed by the organisation?

The data that Thorpe Park processes involves getting information in order for them to make the required systems and databases. They get information needed for their Admissions Databases from the customer such as when they book online for their ticket; money is extracted from their credit card. Every time a customer buys a ticket, either online, by telephone or at Thorpe Park directly, the information is recorded in their database. CCTV cameras can be placed around the park accordingly where they find danger ar eas. This information is obtained internally by staff inside the amusement park. For them to make sure the ride is safe for people to go on, they need to get information from the designers on what features the rides has, it's speed, how long it is etc. This lets them create a system that makes sure the people are safe on the ride and that the ride runs smoothly and properly.

## How the software meets the organisation's needs?

The organisations needs are met by the software used in many ways such as computers being used to control the rides, the main attraction and which provides the business with their main income of money. Also testing of rides to ensure they are as safe as possible. With these tests they use ICT instead of humans as it provides accurate and sufficient results. When advertising the amusement park, ICT is better to use as it can attract customers in better ways such as TV advertisements and radio. Security is also managed by computers as they are less likely to make an error in the work they do like humans.

# Comparisons between the use of ICT in Babcock Infrastructure Services and Thorpe Park

Both the organisations have one main objective which is to make money. They also make their money in the same way by providing a service. In Thorpe Park ICT was used more for security and making sure that everything was running smoothly whereas in Babcock Infrastructure Services ICT was mainly used to create information and develop on it. However, both organisations used ICT as it is more reliable, secure, accurate and more professional than using other means. Babcock Infrastructure Services uses ICT to create designs, and store information about buildings they create such as measurements and appliances. Thorpe Park uses software programs in order to make sure their systems were secure and running well. Babcock Infrastructure Services used hardware that would help them create and send off information to other employers or clients such as drawings measurements, ideas etc. Thorpe Park used hardware mainly for advertising and security benefits e.g. Metal detectors, Digital cameras, CCTV cameras and Seat restraints.
Both organisations information came from internally as they both provided a service.