

How a large organisation uses ICT

The company I am going to look into detail on how they use ICT is Asda the UK's number two supermarket. Asda is owned by a mega America company call Wal*Mart. Asda have also got an online shopping site which has been running for 5 years, this is where people can order there shopping online and get it delivered to there door. For elderly people or people who cant drive this is brilliant for them. To pay for your shopping you enter your credit card details and Asda will automatically take the money you have spent out of your account. Online prices are exactly the same as the prices in the stores but there is a £4,95 charge for having your shopping picked of the shelves and delivered to your home, this method avoids the hassle associated with supermarket shopping. Asda set up an online shopping website for several reasons and one of these was to advertise the online part of Asda and attract new customers.

Asda's headquarters is situated in Leeds. Asda operates across the whole of the United Kingdom and they have 265 supermarkets. The Asda online shopping website is currently operating in 53 of Asda's largest stores but they planning to extend this in the coming years. Each of these stores employ pickers and drivers as well as a supervisor and a manager for the online shopping part. Asda's Leeds store also has a Customer Contact Centre which is the central point for orders to be placed and also to deal with any customer problems or enquires.

A massive organisation like Asda is supposed to provide people with a service they are happy with but there main objective is to sell top quality reliable products to people. Asda also is suppose to provide an effective and friendly customer interface as well as communicate effectively with their old and new customers. Asda has seven main objectives they wish to achieve, these are

- ☐ To have a friendly and effective customer interface
- ☐ To manage customer data
- ☐ To communicate effectively with customers
- ☐ To find new customers
- ☐ To analyse customer trends
- ☐ To process customer online orders and payments
- ☐ To communicate effectively with other members of the organisation

If Asda do not reach these objectives then they will not attract new customers and the customers that shop with them will leave which means not as many sales so not as much profit.

With Asda being a huge company the only way they can store the massive amount of data they have is to store them on a database. To manage all the information on there online customers Asda have set up a database and is maintained by the employees at the headquarters in Leeds. The database Asda has stores details about all their online customers and the details includes contact details, payment details and what customers buy. Databases are great for big companies like Asda, Curry and Tesco's because with databases you can break all the data down so if Asda wanted to know what people buy tins of beans they can put this in the database and the database will only bring up the people who buy tins of beans. The main advantage of databases is that if you want to find something you don't have to go through all of the data which with some big companies there is millions of data saved you just put in what you are looking for and the database will bring it up for you and finally databases saved a lot of time as you can go through the data in minutes.

Asda contacts there existing customer by e-mail and tries to attract new ones. The reason Asda have used this method of communicate with their customers is because it is cost effective, also it is a way to keep existing customers informed of any developments and to reach new customers. Asda use their e-mail system to sent e-mails to customers to confirm their details when they first log on and register with the company as wanting to start and shop online. Asda also contact customers through e-mail when customers amend their account details and are sent an e-mail after each order has been

placed online. Asda also send their customers details of special offers at regular intervals as well as after their first order has been placed also if there is a long run in between orders then Asda contact them to find out the problem. Customers are bulk e-mailed if there is going to be any disruptions with the service for maintaining or updating. Also as well as Asda sending e-mails to their customers, customers can also e-mail Asda if they have any queries or some people may want the stores stock item list. Within the organisation the e-mails system is used to keep store manager of the online shopping system up to date. Also this method is used by the larger company as a means of communication.

Asda helps customers get their orders delivered at a time that is suitable for them. They do this by when a customer orders online they offer them a choice of delivery times for up to three weeks in advanced. Asda only show on their website the only available delivery slots when the customers order can be delivered. When the customer has chosen a date they want their shopping delivered the chosen date is then sent to the store and a route planning program works out where the driver needs to go.

ICT is used by employees who work for Asda, the ICT they used is a Palm top computer which then links to the main PC based ordering system. The orders are then transferred from the web based system onto the Palm top computer which a stores employee carries around the store to select the required goods. The Palm top computer is also used to update the main PC with details of the completed order. Then once the order has been gathered from the shelves it needs to be delivered to the customer.

Asda employees can communicate with each other through a few different ways in more stores across the UK some employees carry walkie talkie to communicate with each other which is a very simple and effective way of communicating with their employees. Another way of communicating is by video conferencing. Asda's technical development of the online shopping system is carried out by teams in America for the company Wal*Mart. This large company has the experience and expertises needed and can work at greater economies of scale. With the time difference between the UK and America it is important to plan conversations between the developers in America and the staff that are operating the system in the UK. Rather than the developers from America flying backwards and forwards across the Atlantic which can be quite expensive a lot of day to day meetings are held using video conferencing instead of telephone or e-mail. The advantage of this is that it lets the America experts show the UK based programmers how to improve the web site it make it look better and to try and attract more customers.

On the diagram above which links the IT team and the shop team together I have been able to put the customer on the diagram. The only place I could think I could put the customer was in the shop team as after the pickers and the driver the only place the products go to after that is the customers.



Marketing teams have a very important job to do, their job is to market the product but marketing involves more than just selling or advertising, it is also the art of making it as easy as possible to get potential customers to buy the products. Marketing teams aim is to advertise the products in the best way possible to attract as many customers as they can. Marketing teams also look into the product itself to see if it will fulfil the customers needs and wants, also they look into the price of the product and where it is located because if the price is to high and it is located in the wrong area then the product will not sell well at all.

Every big business will have a finance team that will work with them to keep their finances on track and up to date. All a finance team does is deal with the business money issues and make sure everything is there. Also finance teams can help businesses that are having a real financial problem try and get out of trouble and stop them going bankrupt.

Trading teams are people that buy and sell products, most trading team buy products for quite cheap but they sell them on to other people for sometimes double what the product is actually worth.

Operating teams are involved in the running of the business for the purpose of producing value for the stakeholder, operating teams can have a big say in what the business should do and not do as there main task is the involvement of running the business as smoothly as possible as they can..

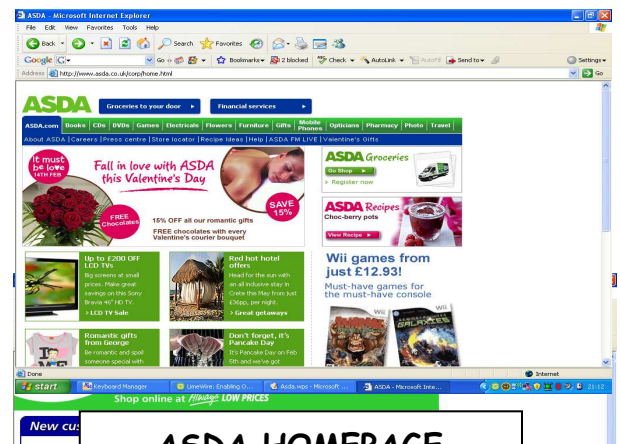
Asda customers can use the system really easily, their website is straight forward with bright colourful colours that make the website stand out so it attracts people to read it and look through it. From the homepage of he website you can access the on-line shopping site by clicking the 'Groceries to your door' link at the top of the home page. By click thing it will bring up a screen like the one

below which will ask you if you are a new customer or an existing customer, people that have already registered only have to put their e-mail address or customer ID number in as well as their Asda pin and they will be able to start their shopping online. If you are a new Asda customer then you will have to complete a registering sheet which will include, your address, name, telephone number etc before you can start shopping online but it is quite straight forward so it shouldn't take you long. To select goods on the Asda online shopping site you click on whatever item you want to purchase and then it will bring up a screen like the one below which will give you a description about the product and it will also tell you what features the product has so you get a clear view of the product before you purchase it. If then you are happy with the product you can buy if but you can only buy products if you have registered if you haven't registered then you cant buy any products until you have. Asda has a wide range of payment methods customers can used but on their online shopping website they can only pay by credit card. The reason Asda have done this is

because paying by credit card online is much quicker and easier, the reason for this is because when a customer has finished their shopping online and they are ready to pay all the customer has to do is enter the digits on there credit card and click finish shopping and his or hers credit card details go straight to the Asda store

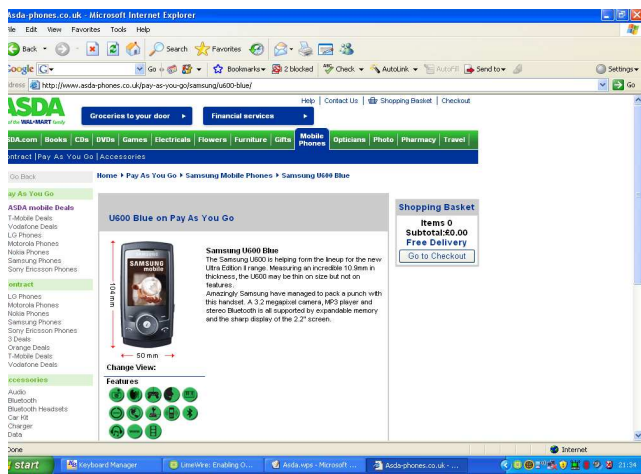
they are shopping with and the Asda employees enter

REGISTERING PAGE



ASDA HOMEPAGE
ON-LINE OPENING SHOPPING SCREEN





SELECTING GOODS

having their money pinched and in some cases all of their money in their bank. Asda has their delivery service routing really well, when a customer has done their shopping they are offered a choice of delivery times for up to three weeks in advance. Only available slots are shown. The customer's chosen date is then sent to the store they are shopping with and a route planning program works out where the driver has to go.

Asda has a number of computer they use but the computers Asda use are either standard Windows based PC's or they are Apple computer systems. The computers Asda has are all high specification computer just look at the Apple G4 or Pentium 4 processors with at least a 512mb memory. The Apple computer screens are LCD types they used this because it minimises the strain on the eyes of the users who are working on them for long periods. The computer that are at the store end of the system tend to be Windows based because these are the most cost effective for the purpose of receiving data and transferring that data to the Palm PC's. The Apple computers are mainly used to focus on the design and appearance of the website. The internal network cables are standard Cat5 Ethernet linked through Cisco switch units that are all running at a standard 10/100Mbit. The link between Asda's headquarters in Leeds and each store use an always-on broadband network. The reason for this is because it is more effective than a dial up network as it operates at a higher speed so therefore there is no delays between sites. Other companies that run the same kind of operation as Asda does not operate it's own file servers but out sources this service to a large ISP that is used to dealing with large scale communications systems. The processing and storage of e-mails between the store and customers are dealt with by this company.



DELIVERY VAN



APPLE MAC COMPUTER

The reason Asda normally have two types of computers is because they use the Windows based

The Palm PC's that are used in the stores are linked to the local store PC using a wireless set up. The wireless access points are Cisco Aironet devices the latest being the 1200. This allows for easy communication between the two devices, for this you only need one broadcast station to transfer data rather than hard wired sockets which would be more expensive to set up. The Palm PC's are used by the employees of Asda to carry around the store they are sometimes used for the online shopping as the orders are transferred from the web based system onto the Palm PC.

computers for storing data, stock list etc, on the other hand the Apple computer system is used for the multimedia side of the business including the online website as it has a memory of 512mb . The Palm PC is a very suitable gadget for the Asda employees as the Palm PC is linked to the local stores PC using a wireless set up. The Palm PC is used for the online shopping orders as the local store PC sends a list of items to the Palm PC that customers want.

The software Asda uses to set up the on-line shopping system is a mixture of readily available commercial software and some software that has been adapted specifically to operate the system.

Adobe Photoshop

This software is used by the web designers to set up the look and feel of the website, the ordering system and ordering communications. This program can be used simply to set up the corporate look of the website and arrange the layout of the screens. The web links and financial dealing are programmed in HTML . This is mainly used by software programmers to set up secure web pages.

Macromedia ***Dreamweaver*** and Adobe ***Go-Ahead*** are mainly used to construct the framework of the website and also check that screens that have been created by the programmers in HTML look as required by the customer. If Asda isn't happy with the structure of the website they can easily alter it by using this software if necessary.



The ISP Asda use is also able to track e-mails and provide Asda with details of which e-mails have generated replies and at what times Asda users are viewing the website. When Asda customers shop online the details of what they purchasing and what they have purchased in the past are saved in a large database. All the information Asda have is available to analysis and extract, Asda do this because they can provide customers with individualised e-mails and special offers which match their regular purchases. Data is extracted from the database using SQL (Standard Query Language). This software is used by all major database users because it is a easy way to search large amounts of data. When a customer purchase data is extracted it is usually exported into Excel for analysis.

When Asda are going to send bulk e-mails it is carried out by using a piece of software called ***WebMailServer***. This is a web based application that allows Asda to do a mail merge into e-mails for example; e-mail addresses from the customer database can be merged with information the company wants to send to it's customers. The program also deals with responses to the mailing by directing e-mails to the appropriate department in the organisation.

The software system that Asda use are comparable to those used by other companies. All of the systems are similar in costs and features used. On the e-mail side a human operator still has to do the e-mails. An automatic response can be sent out to say an e-mail has been received but to give the customer any meaningful answer someone has to read the e-mail and work out a reply to it

Most supermarkets that have a online shopping website like Asda use different types of hardware and software.

A hardware that most supermarkets have is a Apple Mac computer these computers are mainly for creating and designing things such as websites. Apple computers are top of the range computers but

they are quite expensive but if you want a better quality website then the Apple computer is the one. Apple computers are complex to use at first but when you get the hand of them they are easy. These computers have a big memory of at least 512mb also the Apple computers have LCD screen which minimises the strain on the eyes of the users who are working on them for long periods.

A software that most supermarket use is Adobe Photoshop, it is simply to set up the corporate look of the website and arranging the layout of screens using this software. Adobe Photoshop is used for storing images as well so this will come in handy when it come to putting images of the products on the online shopping site. Also on Adobe you can create calendars , greeting cards etc.