

# [Information management 17951](https://assignbuster.com/information-management-17951/)

Executive Summary

The report aims to address the issue of information management within Lanway. Information, may feel is the most important resource any firm has, yet many firms have no appreciation of the cost, value or importance of the information they hold.

By first outlining the steps and findings of an information audit carried out within the firm, conclusions are then drawn as to what measures should be taken in order to increase the effectiveness of Lanways information usage.

The measures suggested are outlined in detail, with recommendations of both hardware and software. The report also establishes the need for information and for a company information strategy highlighting the importance of aligning such a strategy with the overall business plan.

Background

Lanway Corporate Business Systems began trading in 1985 from a small market stall on Burnley market. Selling games only for the Spectrum range of computers (the most popular at that time) it began to build up a regular customer base. The firm continued in this way, until 1991 where the introduction of the personal computer led to a change in product and business activity.

With the introduction of both new hardware and software, Lanway was now in a position to manufacture and sell its own PC s. By moving into its own premises, the firm was now able to make substantial profit margins by building and pre-configuring a small range of machines. Lanway began to trade with other firms in 1994, at which point they were forced to expand both their existing premises and staff. They also began to diversify, moving into new areas such as networking technologies, the internet and more specialised hardware and software.

Lanway currently has a turnover of approximately 5 million and over 40 staff, both of which are expected to continue in growth. They manufacture around 200 PC s per week, each different in model, make and specification. The company classes itself in the batch manufacturing bracket.

At present, the firm can be split into 5 departments. Sales, Accounts, Networking, Repairs and finally Production or Workshop. The firm is completely networked using a mixture of Microsoft and Novell technologies. Individual internet access and email is available to all employees. All hardware and software configuration work is carried out in-house.

Because the firm has grown in the manner that it has, many of the systems and functions in use have grown from a bottom up fashion, as opposed to a more strategic top level approach. Initial observations would suggest that information management within the firm does not differ from this.

Information Audit

An information audit is the assessment of the information held by an agency and of its information activities. (Australian Audit Commission 1999).

The purpose of an information audit is to assess, not only what types and levels of information a firm may hold, but how well it meets the needs of the company. Different components of information may already be controlled, such as naming conventions or security passwords, but in most cases firms have little understanding of the relevance, cost or value of the information they hold.

Therefore in order to ensure that all relevant areas were covered, a formal plan was first drawn up. To ensure that useful conclusions could be drawn, the objectives and scope of the audit were assessed. These included

What types of information sources exist

Are they still relevant

Are they currently accessible

Do employees know they exist

Formal documentation was then designed, in order to maintain a consistent theme by all involved. This too added to usefulness of the findings. Finally an assessment of the overall findings was carried out, to ensure that all anomalies and incoherent data could be accounted for. Only then, based upon the findings were recommendations produced.

After analysis of Lanways current operating environment and business activities, the following information sources were identified:

Emails

The Internet

Stock and Accounts database maintained by the same system

Customer database

Written brochures / Price Lists

Employee home folders

Emails

Data stored within the emails ranged from price lists, customer account details, recent price quotes and specific product enquires. These were also combined with a range of personal emails, both from internal and external sources.

Each employee, upon starting work was given a secure email box, from which they are able to send messages to both internal and external sources. Each email box requires user authentication, however network administrators are granted rights to open any mailbox within the system.

Here we immediately see problems with regards to both information availability and security. Because only that user has access to the mailbox, no other employee is able to access, what may be at times critical information. Security and data integrity is also compromised, as the email server also acts as the firewall server, and as such is open to internet attacks. It is also at the employees discretion whether they wish to delete messages stored within their inbox, messages which may prove later to hold important or even critical information. Once an email has been deleted, it is almost impossible to retrieve it.

The Internet

Lanway rely heavily on the internet and the features it delivers. This includes company product specifications, product support sites, private business partner resources, online databases and current news information. Lanway also have direct links to suppliers via the World Wide Web, thereby creating multiple extranets.

Every departmental manager within Lanway classed the internet within their three most important resources. This in itself shows the importance of the role it plays in today s business market. For firms such as Lanway, it is the fastest and most efficient way of obtaining up to the date and accurate (in the most part) information and offers the best cost/benefit trade off.

However the internet brings with it, from an informational view point, a host of inherent problems and issues. Lanway, like many other firms suffers from this.

In most cases, staff were unaware of many of these, and as such the quality of information suffered. The accuracy of the information received is on the most part never checked, and in some cases was then stored to be used for future reference. No guidelines exist as to whether only official websites were to be used, nor had any training be given on effectively using the internet itself.

No one information store was available, in which staff could save data collected, such as URL s or product catalogue s, and in some cases, staff were not aware extranet facilities existed. As such, each individual employee held their own specific ideas and information on using the internet and in many cases time was wasted performing repetitive tasks and retrieving duplicate information.

Once again, because the sharing of information was minimal, the speed and accuracy of the data received was greatly reduced.

Stock and accounts database

Both of the above databases are stored on the SAGE system and as such are integrated. The stock system contains records not only of items currently in stock, but also previous purchases, dates and times with regards to stock control and trend analysis data. The accounts system contains all data concerned with maintaining and running the company accounts, combined with company payroll and sales transactions.

Unlike the previous stores, information held within these systems is not designed to be shared. To access each area the user must have the required level of authority. This is simply for security and privacy reasons ie. Only certain members of staff can be given access to payroll.

Information held within both systems is critical to the running of the business, without it is impossible for any business activity to take place. All the data held within the system maintains it validity and integrity because it is the main transactional system within the firm.

Customer database

The database is currently accessed using a Bespoke application built in house called COSMOS, using access database tables as its base. The program requires user authentication, however all user names and passwords are stored in an access database table which can be opened directly from the network drive. As such security within the system is minimal.

The system has been in use for over 8 years and once again suffers from a bottom up approach design. The accuracy of the data is compromised because no formal checks or guidelines exist as to what may be entered in to the system. The security aspect also aids to increase this problem. Duplicate records and anomalies are common place.

The age of the system also hinders its accessibility. Although every employee is granted access, many find the system prone to crashes or incorrect record retrieval, again a time wasting activity. Some sales executives said they used their individual Outlook address book to keep their account information, the main reasons being increased speed, reliability and security.

Employee home folders

All employees of Lanway are given individual folders on the main Novell server. Using an advanced system of authentication, only that employee may access their folder. Other users folders are hidden from view accept to system administrators. All word tender documents are stored on in this folder, technical staff store product information and essential applications here. Employees are advised to store all other important documents here as the system is backed up on a regular basis.

The accuracy of the data stored within here is not of real consequence to the firm, more to the individual employee, who in themselves are responsible for the task. However, once again the issue of information availability becomes a problem. For technical staff, important information and applications are hidden away from other members, whereas sales staff are unable to gain access to colleagues quotes if required without the assistance of an administrator. All network administrators are regularly out of the office on customer callouts.

Product catalogues / written documents

Due to the nature of Lanways business activity, the range of products sold goes beyond vast and continues to increase by the day. Because of this the firm receives numerous literature on a daily basis. No formal filing system exists, all booklets are thrown onto double desks, or kept by the employee whom it was addressed to. Again issues regarding the availability and relevance of the information are brought into question. Important reference material or current news articles and magazines therefore become unavailable, simply because most employees do not know they exist.

It is clear from the above findings, that although Lanway holds and has access to a vast amount of data and information, its overall management of the resource is poor. As such these issues must be addressed when deciding on an information policy and the successful implementation of a Information Service.

Strategic Information Policy

In order to address these issues, Lanway must first define its information policy. Many of the problems identified earlier stem from a lack of strategic planning, thereby creating inappropriate systems and methods. As such this policy must be aligned with the overall business one and all new systems must serve only to strengthen this.

From the findings of the audit, it can be observed that the sharing of information is a critical issue. Much of data stored is only available to certain employees and it is at that employees discretion how the information should be stored.

The recommendation is to introduce a controlled information environment where the main aim is information sharing throughout the company. This includes not only ensuring all information is freely available, but employees are specifically informed about policy changes and new developments.

Establishing Information Needs

Hickie argues that an information rich organisation is a successful organisation. This may be true in part, however it is the management of this information which enables the firms success.

Therefore in order to ensure each employee has access to relevant information, such needs should be broken down on a departmental basis. However a significant overlap appears and as such information that is suitable for one department may certainly aid other departments needs;

Sales

+ Internal company information this can range from employee guidelines, holiday availability, new company policy or even company car arrangements.

+ Latest news and technology stories information on current market trends, predicted advancements and current vendors strategies

+ Product specifications this includes lists of available types of both hardware and software, the features they possess and the situations they best suit.

+ Current pricing catalogues – the IT industry is perhaps the most dynamic of all. As such, products and components prices can change on a daily basis. In order to offer competitive prices, sales executives must be aware of this.

+ Competitor information this may include current pricing or product strategies, financial information and company background.

Accounts

+ Internal company information

+ New accounting product releases only accounts staff will be able to judge the effectiveness of new accounts software. As such it is vital that they are able to make an informed decision.

+ Current accounting news and new practices vital for any accounting department wishing to maintain a competitive edge. Such sources also provide help and advice on new practices

Networking

+ Internal company information

+ Technical support information this may be product specific or general tips and usage information

+ Product updates / essential applications vital for current systems. As new releases and service packs are issued, this department is responsible for customer receive the right components.

+ Product driver banks due to the large number of products sold, networking employees need access to all drivers concerned with these in order to provide and effective service.

+ Past problems / customer specific many problems encountered and repetitive

+ Current relevant news articles

Repairs

+ Internal company information

+ Technical support information

+ Hardware specific manuals the repairs department are concerned for with hardware failure than software. As such different hardware and configuration manuals are required.

+ Past problems / customer specific

+ Current relevant news articles

Workshop

+ Internal company information

+ Hardware specific manuals

+ Past problems

As can be seen from the above findings, many of the information sources required by departments overlap with others. This benefits the company from a cost point of view as departments may then share these resources.

Implementing the information service

Within Lanway, two main types of information exist, electronic and paper. Therefore in order to effectively use these resources, they must be managed in a way that best allows them to be accessed.

Paper

All brochure documents received are to be immediately filed in new filing cabinets situated on the sales floor simply because space exists there for them. Each publication is to be filed in alphabetical order under the company heading, with a post it note stapled onto it, giving details of the date it was first entered and which employee was responsible for it.

The filing cabinets should be reviewed on a 3 month basis and any duplicate/old data should be removed and shredded.

Electronic

Two types of electronic information exist within Lanway internal and external sources. However in order to provide a consistent theme, employees should be able to interface both in the same way. The simplest and most effective method of achieving this is by using web technologies.

The internet has evolved over the last 5 years as one of the most important factors for successful business and is continuing to do so. A whole range of resources can be obtained via the internet, including searchable online databases, intelligent problem solving systems and other business tools. It would therefore be unwise to attempt to find alternative means of accessing the required data, when the technology already exists and is free for any firm to use.

The current network at Lanway all 100mb will remain intact, as this is currently the latest and most cost effective technology available for firms of this size. The internet connection will be upgraded to ASDL from ISDN, therefore lowering operating costs and improving speed.

The first step for Lanway will be introduction of an intranet. This will be hosted on a new Microsoft Web server It will be via this that all electronic information will be accessed, including the internet itself. The online news stories will taken from Silicon. com , a free online news resource specifically designed for IT firms. Each user will be given a specific user name and password, so that their entrance page may be tailored to their individual needs.

The accounts department will gain their current news and information from Accounting. net , a leading American accounting resource. Once again, the service is free and can be tailored to individuals needs. Both will be accessed via the intranet through absolute URL s created via Active Scripting when users first log on to the Lanway system.

All internal company information will be posted on the website, and employees should be made aware of new data through the use of email. An internal mailing list will serve this purpose.

Technical support information will be obtained via vendors own websites and subscriptions to Microsoft Technet Novell Support Connection , Symantec Support and 3COM Utilities. The latter sources are comprised of CD-ROM s which arrive on a monthly basis. As such it is recommended that Virtual Drive is purchased, thereby eliminating the need from a CD-ROM network server. Instead, all contents can be copied to the hard drives, creating multiple virtual CD-ROM drives. This improves performance and network reliability.

Three new databases are to be set up using SQL server as the base. They will be accessed using web browsers. The first will contain all necessary links to internal applications storage required by technical employees and will also include a brief description of the uses for each application. The second will contain detailed hardware manuals, which if necessary will be scanned in from paper or written by departmental heads. The third will contain past problems related to customer accounts including hardware, software and individual configuration issues.

All of the above systems will be fully searchable using CGI scripting via the web browser on all fields contained within the database offering a choice of title, topic of keyword to search on. All employees will be given full access to the databases, however only technical staff will be given rights to add to the system. Again checks on the information stored on to be carried out on a three monthly basis.

Summary

Information is of key importance to any firm, and that is especially true of Lanway. Because of the nature of the business and the products sold, it is vital that the information stored within the internal systems is accurate, relevant and accessible by all employees.

By implementing the steps outlined above, many of these issues should be addressed. However it is up-to the company as how successfully they are implemented. Employees will need to be made aware how important the new systems and the new policies that have been introduced are. Only then will the firm begin to see benefits.

The costs incurred in this project are minimal, simply because all work can be carried out in house and all products purchased at almost cost, although formal training is certainly recommended something which will need to be outsourced. The new intranet should help to increase the distribution of information and the consistent manner in which employees are able to access the information should in the long term help the new systems to be used effectively.

In order to ensure that Lanway obtains the required results, an information audit should be carried out on a yearly basis thereby identifying any problems that have risen from implementation of were overlooked on previous audits.