

Introduction

An independent research organisation recently examined the work practices of 1,501 companies in six countries. They found that disorganised work practices within these business organisations wasted time equivalent to an average of 98 working days each year for every person employed. In terms of employee productivity, the UK came out the worst. On average, people were working effectively for only 48 of the time. Poor organisation was largely responsible. Prominent within this poor organisation were inadequate systems for managing information and communication.



Information and Communications Technologies (ICT) help modern organisations to be better organised and to meet their objectives more effectively. Good ICT solutions enable an organisation to:

- handle much larger quantities of information and other resources
- achieve much higher accuracy levels (make very few mistakes)
- reduce the costs of all their processes
- improve the services offered to internal and external customers.

This case study illustrates ways in which organisations like schools and businesses can become more efficient by integrating their ICT effort. This may well require them to call on the services of an integrated ICT provider who can help such organisations to control costs and to reap the benefits of utilising IT systems and multi-functional devices in an integrated way.

Schools can benefit directly by using modern Information Management Systems that save and release staff time. Society also stands to gain; students who become familiar with good Information Management practice whilst at school are better equipped to become effective members of the workforce of the future.

The Canon story

Canon was founded in Japan in 1933, and first made its name in the 1930s as a producer of cameras. It became associated with high levels of innovation and product development, and in 1964 it branched out to produce the Canola 130, the world's first 10-key electronic calculator.

During the 1960s Canon became a truly international company with exports accounting for 50% of sales. In 1968 the company moved into photocopying and by the mid 1970s Canon was producing laser printers. During the 1980s and 1990s the company continued to innovate, developing high grade computer systems and more sophisticated cameras, copiers and digital imaging systems.

Increasingly the company has focused on developing environmentally friendly technologies, producing recyclable copiers and other equipment.

Today Canon is known for providing state-of-the-art integrated IT and office solutions, as well as top class photography and imaging systems. In the UK, Canon is an industry leader in imaging products and services for digital environments, both in the office and at home. Canon's technology is designed to enable companies and individuals to achieve their goals - an objective which is encapsulated in the company's "You Can" philosophy.



Operating the core business

Companies which set out, through their products and services, to help other companies become and remain efficient operators need to be at the forefront of innovation and good practice themselves.

Canon prides itself on the research that it carries out into developing new technologies. It has research centres located in Europe (e.g. France, UK) USA and Japan.

The company operates in a highly competitive environment. It recognises the importance of managing its processes in ways that ensure that its new products come to market quickly, are to the highest technical specifications, and can be competitively priced.

Key to this is Canon's appreciation that a good Information Management strategy is an essential component of business success. Today's businesses are faced with a mass of documentation, emails, and other paperwork circulating around them. Canon has developed skills and technologies to take control of this potential information overload, the know-how to manage it and the ability to share it throughout the organisation and beyond.

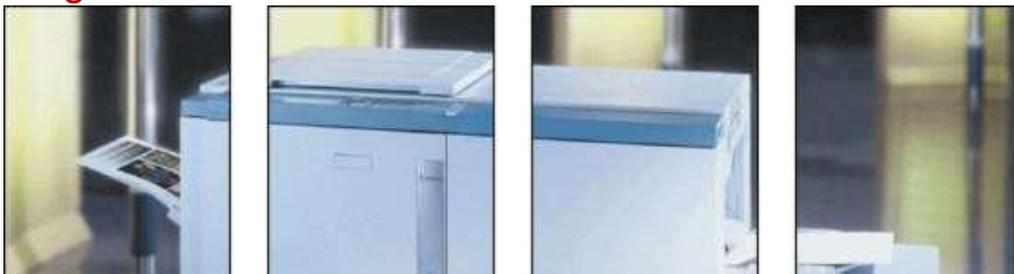
Canon has used its technology, understanding and systems integration skills to help improve its own business processes - aiding it to become more efficient, more productive and more profitable.



Because it understands the important contribution of Information and Communications systems to effective working, Canon is well placed to help other organisations improve their own Information Management Systems. With its history of technological innovation in the fields of state-of-the-art integrated IT, office and imaging systems, Canon seeks to continually provide solutions that best meet customer requirements.

For today's digital, networked offices, this means providing a range of Information Technology and Communications solutions built around a core set of digital products.

Strategic management



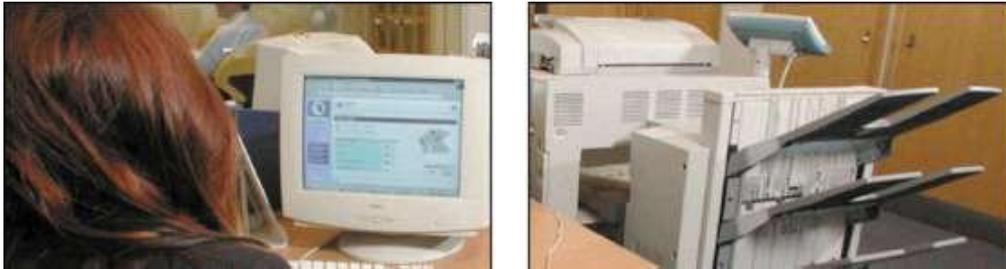
Strategic management involves making long-term plans that are clear and well thought out, rather than simply reacting to problems when they arise. In business, we make a distinction between a reactive organisation and a proactive one. The proactive organisation is the one that plans ahead. Unfortunately many UK companies are forced to operate in a reactive way, and particularly in the area of developing an Information Management Strategy. The problem is that, as companies grow, they need to deal with their customers in more complex ways - and their current Information Management systems need to be updated. Some add individual components to their existing systems (helping them to maximise the value of their previous investments), while others will start from scratch. Whichever route a business takes, it makes sense to think strategically, and particularly to examine ways of integrating the various compatible components of information systems e.g. copiers, computers, printers. Many organisations have the correct equipment but may not be using it as effectively as they could, others - such as Oaks Park High School in Essex, where Canon has built an advanced ICT network for use by teachers and pupils - are able to build solutions from the ground up.

The whole picture

The key to successful Information Management is to link together the various components of an Information System. For example, once connected, a central copier replaces a host of desktop printers. Also, within a properly integrated system, staff can access fax services direct from PCs.

Information management is all about helping people to carry out their daily work in a more streamlined and efficient way. A well integrated information system will ensure that staff:

- spend less time on contributing/seeking/extracting/retrieving data
- undertake fewer tasks when handling information
- generate less paper-based data
- have access to a system that is secure and protects confidentiality where necessary.



Let's look at how this can happen within an integrated system. Suppose that a school's business studies teacher - Joe - urgently needs to order a new textbook that has just been published and reviewed.

- 1 Joe e-mails the school office to request an electronic copy of an order form.
- 2 Joe completes the electronic order form and e-mails it to the Head of Dept for approval.
- 3 The Head of Dept having given approval, Joe prints off a paper copy of the order as a record, and forwards the electronic document to the school office, which must see all purchasing orders.
- 4 The school administrator has a query about the exact ISBN number of the book so contacts Joe via a Virtual Private Network (VPN). The VPN automatically forwards both the document and the call.
- 5 Joe clears up the query and automatically sends a final copy of the order to a printer in the office. Office staff are able to send off the order (electronically) to the bookshop and to place copies of the order in the appropriate central electronic and card files.

When the book arrives, the information system's software can, in a matter of seconds, record the acquisition, make the payment, debit the appropriate accounts and update stock records.

If the system was not integrated, every stage in the process would be more complicated and prone to error. For example, Joe would need to make multiple paper copies of his order, which he would have to personally deliver to his Head of Department and the School Office for signatures. He would have to visit them at a time when they were not busy, and a letter would need to be sent with the order.

There is a good chance that at some stage the order would be left waiting for a long period on someone's desk, and there is a fair chance that important information might be missed out or lost in the process. In contrast an integrated system takes out the delay, uncertainty, and waste of resources involved in information handling.

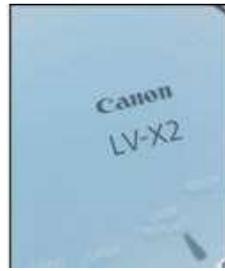
Information handling: providing the solutions

The elements of an Information Management System.

- Peripherals - black and white and colour copiers, laser and bubble jet printers, scanners and faxes.
- Networks - servers, PC's, cabling, firewalls etc.
- Document management - software which supports the products and offers users the ability to scan, file and retrieve documents whilst saving valuable storage space.

As a major provider of these solutions Canon has played a significant role in helping a range of business and non-business organisations to develop better Information Management Systems. It has also developed a tailored suite of ICT solutions for the education market. These are designed to keep costs down and minimise teachers' administration time, therefore allowing them to concentrate on their real job.

The aim is to equip educational establishments with a business level, ICT infrastructure that not only meets the organisation's own needs but also contributes to producing the



workforce of the future. With such a system, schools are able to enhance their students' ability to learn, practise and hone their information management skills. For example, with the right infrastructure in place, students could access the school's website remotely from home to help with their homework. This site could even contain lesson notes to assist parents/carers in supporting the learning experience.

Many schools operate within severe budgetary constraints.

One solution therefore is to lease rather than purchase outright. Buying outright ties up resources that could better be used for other educational purposes, thus using a significant portion of the head-teacher's equipment budget. Increasingly schools recognise leasing as the best solution for hiring hardware such as computers and other essential equipment like copiers.

Schools are relatively large organisations, and as such are able to benefit from economies of scale, including technical economies. Technical economies stem from using more sophisticated techniques to reduce costs. Proactively developing an Information Management System based on the latest peripherals, document management systems and voice data is a good example of using technical economies of scale for better financial management.

Economies of scale are the advantages of doing something on a large rather than a small scale. Economies of scale lower the unit cost of production. For example, producing 1,000 high quality copies of a school prospectus on a modern dedicated in-house copier, is much cheaper (per copy) than ordering 100 copies of the prospectus from a local printer.

Conclusion

Sophisticated Information and Communications Technology systems contribute to the efficient running of organisations. An integrated system such as the one outlined above enables all of the separate parts of the organisation to pull in the same direction. Canon has a long history of providing appropriate technological systems to businesses. The company is now helping educational organisations to operate in a businesslike way through the development of strategically focused Information Management Systems.

