

Counting and cutting the cost of IM

Realising the true value of information can require significant up-front investment. In most cases though, a worthwhile return is not hard to find.

Most companies benefit from developing an information management strategy, and investing in an appropriate systems infrastructure to support it. Information, after all, is the catalyst that drives all of modern business. So any organisation that takes the trouble to formalise its use of information can expect to be rewarded in a variety of ways – from streamlined business processes and improved business flexibility, to increased innovation.

The question is: which area of information management to tackle first and how far to take the reform.

The detailed answer to this question obviously depends on the specific circumstances of each organisation. However, there are generic processes that almost all organisations can use to martial their informa-

tion assets to good effect, and any company that wishes to optimise its information assets can begin by focusing on one or all of these four key activities: information or data acquisition; information processing (such as workflow); information storage; and back up.

Each of these activities has associated costs that naturally vary according to the scale or sophistication of an organisations' operation. One company's information acquisition gateway, for instance, may be a mailroom, another's may be a 500-seat call centre. Likewise, information processing can mean re-keying figures into a spreadsheet every week, or scanning millions of documents a year into a globally distributed system.

Whatever the circumstances, careful analysis of each step in the information cycle can almost always

THE CASE FOR PRINT MANAGEMENT

According to IDC most organisations don't know how many hardcopy devices they own, and just 48% track overall hard copy costs. Yet, research suggests that direct hard-copy costs (including hardware, supplies, maintenance and support) can account for as much as 0.2% of an organisation's overall annual revenues. Companies that make the effort to manage their print output, says IDC, have reported cost savings of 13% to 40%.



In recognition of the potential gains of better print management, many suppliers of printing and imaging equipment now offer customers a 'print audit' service. Market leader Hewlett-Packard, for example, performed this kind of service in 2003 at IT consultancy company Cap Gemini Ernst & Young (CGEY). CGEY identified cost savings of some £1.5 million and reduced its hardcopy devices population from 700 to 500.

Other device manufacturers, including Xerox, Ricoh, Oki, Samsung and Toshiba use print analysis software from Print Audit, a Canada-based specialist provider, in order to identify potential savings and efficiencies at customer sites. Print Audit's software enables organisations to monitor and analyse print volumes, reduce overall printing costs through user quotas and limits on print jobs, and recover billable printing costs from customers or internal users through the use of ID codes.

In terms of ROI benefits, respondents to IDC's survey that had adopted a managed imaging and output infrastructure reported average cost savings of 23%. Of these, 40% came from reduced IT support costs for printing, copying, faxing, scanning and user issues; 25% from reduced costs for consumables; 20% from reduced repair costs for hardware; 10% from reduced costs to install and upgrade devices; and 5% from reduced hardcopy device equipment costs. In addition, 71% said device availability increased.

HOW INFORMATION MANAGEMENT SAVES MONEY

Advantica	Document output and distribution system	100 output devices cut down to 72; Cost saving of over £100,000; ROI: eight months
Argyll and Bute Council	Electronic document and workflow management system, including document imaging	10% efficiency gain, equating to £70,000/annum; ROI: two years
AstraZenaca	Web content management system	Cost of producing web sites reduced by two-thirds; time spent by webmasters on sites reduced by 40%
Barclays Bank	Content management system and document imaging and storage system	Saving of £3,500/month on storage space; £10,000/month saved on staffing costs; document retrieval time reduced from 10 minutes to five seconds
BT	Implemented Intranet portal to provide staff with access to corporate data and market intelligence	Revenue gains of £500,000 from new business
European Court of Human Rights	Web-based knowledge management system	ROI: 8 months; postage costs reduced by \$1 million/year
IFA	Completely automated document management system replacing manual scanning system	Reduced administration time per document to five hours from seven hours
Irish Land Registry	Document management and imaging system	Generates €2.5 million in revenue from Internet-based document searches each year
London Borough of Merton	5 TB storage area network	Cut back up times 45%; Cost saving of £1m through storage consolidation, overcoming back up and recovery bottlenecks
Nationwide	Document management and output system to replace microfiche based system	Requested customer statements produced within four minutes instead of four days; 90% of call centre enquiries now completed on first call
Preston City Council	Output management product	95% of printing process automated; staff productivity increased 30%; running and lease costs reduced 55%; ROI: one year
Time Out	XML-based database to consolidate 80 separate data silos	Content searches reduced from hours to minutes; syndicated content available to partners on the fly, a reduction of up to five days
Willis Group	Consolidated storage with network-attached storage	Saving of £3 million in total cost of ownership

yield opportunities for increased efficiencies and cost savings. In particular, organisations faced with the need to retain large amounts of information stand to benefit from refreshing their approach to information management. This is a group likely to grow considerably as the implications of legislation such as Sarbanes-Oxley and the Freedom of Information Act begins to bite.

Making storage savings

One of the most inefficient and wasteful activities at many organisations is data storage. Relatively cheap but inflexible direct access storage devices are routinely filled to barely 50% of their full capacity or less.

However, according to analysts such as the Butler Group's Sue Clarke, modern network storage devices and virtualisation software now allow users to push storage utilisation to 80% of capacity and beyond. This, she says, not only dramatically reduces the requirement to purchase new capacity, it also reduces management costs and increases process efficiencies, by allowing back ups and data cleaning to be performed more quickly.

The benefits that can be garnered from network-based storage are even greater for organisations that

have been relying on paper-based content management. The cost of storing paper is considerable: £14 per square metre per month is typical – once staffing, facilities and other costs have been factored in.

For those companies that have to retain large numbers of paper documents, one way of reducing costs is to outsource to overseas specialists, says Martin Fahy, a lecturer at the National University of Ireland. However, this can be incompatible with internal business processes as well as auditing requirements, Fahy cautions. It is also only worth doing for large volumes of documents.

By far the cheapest option, where possible, is to convert information into a digital format. The cost of storing 1MB of data (the rough file size of a scanned black and white A4 document) can be as low as \$0.001 per year for a tape-based record.

Eliminating input errors

Of course, whilst digital information is cheaper to store, and easier to manage than paper or microfilm alternatives, the process of digitising it in the first place cannot be ignored. A customer interaction on a web site, including the capture of all the details, can cost less than £1,

according to Datamonitor, whereas even a short voice transaction with a call centre operator keying in details can typically cost around £6.50 to complete.

Paper-based input costs can be even higher, but they can be reduced relatively quickly using document-imaging technology. Robert Markham, a senior analyst at Forrester Research, says that document imaging systems are proven to provide a rapid ROI, saving organisations money through reduced staffing and storage costs and, perhaps even more importantly, reduced errors.

Document imaging systems are at least 90% accurate, which compares well with human input. Unlike manual systems, the errors that imaging systems make are normally restricted to one stage of the information-handling process. Paper-based systems can introduce human errors at any stage.

Analysts at Forrester estimate that input errors cost major consumer goods companies, such as Johnson and Johnson, as much as 0.5% of their turnover. Reduction of human error through automation can, therefore, save many organisations very large sums of money.

Content management payback

Once companies have streamlined the information acquisition process, the next step will probably be to focus on content management. Here again, the opportunities for savings and increased efficiencies will vary widely according to individual cases, but for many, content management is potentially the richest source of information management opportunities.

According to Imam Hoque, a consultant at Detica, even quite small organisations employing between 20 and 100 staff can make significant savings by using document and content management systems to automate and streamline clerical processes, and reduce information-handling errors.

In the case of web content management, according to Forrester's Markham, tools to automate the management of online information frequently realise savings many times greater than the original investment within months. Clarke at the Butler Group, meanwhile, maintains that a 100% return on investment can typically be achieved within nine months with most enterprise content management systems.

Reduced staffing levels, better version control, faster handling cycles and reduced mailing costs are just some of the many benefits that the right content management strategy can deliver. The key to realising them lies with an organisation's ability to recognise where its greatest inefficiencies lie, and then to pick the right combination of content management features to address them. ■

THE CASE FOR DOCUMENT CAPTURE

Organisations have for years been challenged by the number and variety of electronic and paper-based documents that are intrinsic to a plethora of everyday business processes.



These can include letters, forms, faxes, emails, text messages and data from software applications, databases and the Internet.

To take full advantage of this information, organisations need to amalgamate all of the data into a single electronic format. And to do that, many rely on document capture technology.

The document capture process typically consists of three steps: scanning of paper-based information and images, recognition and analysis of that information, and workflow and archival to a database.

Different engines are used to read particular types of information. For example, optical character recognition (OCR) is used for structured documents, such as typewritten forms, and intelligent character recognition (ICR) reads unstructured data, such as a handwritten letter.

Electronic filters can handle various file formats, including HTML, PDF, DOC, XLS, PPT and TXT. These filters enable content to be viewed in a similar format and to be accessed quickly and easily. Most programmes have inbuilt dictionaries and can read multiple languages. More sophisticated solutions can also translate languages.

As PC processing power has increased, so too has the sophistication of the algorithms used to analyse scanned data. This has increased the speed at which documents can be read while simultaneously decreasing error rates.

Algorithms have also been created to enhance images and optimise data that would previously have been unreadable. This means that organisations can scan more documents more accurately, and reduce the need for human interaction.

Automating the process also reduces the cost of data capture. Typically organisations pay approximately £4 to £5 to process each manual invoice. Some vendors claim to be able to halve this cost.

Customer service is also improved with faster, more accurate access to information.

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