

Implementing a Digital Mailroom



A white paper discussing the advantages of Digital Mailrooms

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Environment

The “Paperless Office” Myth

Are paper documents on the rise?

In the last 20 years, working from a screen has become the norm in offices; however, companies still receive and produce large volumes of paper documents every day. The trend is the same around the world: A steep increase in paper received by companies. In the UK, it is estimated that 73% of all documents received by companies are paper documents (62% from mail and 11% from faxes). Electronic documents still represent less than a quarter of the bulk of documents (16% as e-mails, 8% as web forms). On average, companies today receive 3 million items per year and the cost of manual processing of incoming mail is estimated at £0.15 to £0.25 per item.

Furthermore, the use of electronic mail has not lead to a reduction in the volume of paper circulating inside companies. On the contrary, the trend is an increase in the volume of documents printed by companies. Research carried out by IDC Consulting Group in 2006 estimated that US companies printed 1,840 billion pages and according to Lexmark, the typical company will print more than 1,000 pages per employee every month. Therefore, the boom in document printing is directly linked to the development of electronic information exchange. The use of e-mails has lead to a 40% increase in the volume of paper documents! In 2007, 32% of companies still reported a rise in their paper mail volumes.

As a result, paper still represents:

- 79% of Administration Information
- 53% of Commercial Proposals
- 80% of Technical Reports
- 70% of Incoming Invoices

Obviously, implementing new technologies did not lead to a decrease in the volume of paper documents circulating within the company. What

changed is the time and place at which a piece of information is converted into a piece of paper.

Preference for paper

One of the most fundamental values of a paper document is to reassure its owner. For many people, having a paper copy of a document is more convenient and reduces the risk of losing the information. Printouts and copies of documents are still perceived as the easiest way of to circulate information within the company. Electronic documents are often not seen as offering the same level of reliability and security as paper documents do.

Many companies still believe that they are legally bound to archive some documents as paper for a certain time, such as accounting documents or contracts.

However, the reality is that these rules only apply to a small minority of documents. Most digitized documents are now legally admissible in a court of law. The new British Standard, BS 10008 “Evidential weight and legal admissibility of electronic information” covers this in detail. The culture of ‘avoiding risk at all cost’ is what compels companies to print and archive thousands of documents every day.

Even if companies are aware of the significant benefits offered by new technologies to dramatically reduce the volume of paper documents, resistance to change can still limit their impact in the short-term.

Cost Analysis

A former study provides the following figures:

The costs linked to the proliferation of documents are far from being anecdotal. Therefore, most companies can benefit by tackling those costs seriously.

Activity	Estimated Cost
Cost of classifying and archiving a document	£1
Cost of searching for a document	£5 to £300
Cost of a mis-archived document	£150
Proportion of mis-archived documents	3% of the volume of documents
Total cost of managing mis-archived documents	3% to 8% of the company turnover

Reasons for Implementing a Digital Mail Room

More than 70% of companies believe that a digital mailroom would play an important part in increasing the efficiency and success of their organisation. For 20% of them, the implementation of a digital mailroom is regarded as critical.

Mail volumes continue to grow exponentially, stimulated by business growth and mobile work forces. For example, medium-sized companies now process 100,000 pieces of mail a month and service over 200 departments. In addition, the corporate mailroom, a vital link in the corporate information system, is struggling to keep abreast of this paper flow.

Meanwhile, today's organisations demand instant, accurate information; US businesses spend over £300 billion annually turning the information on the documents they receive every day into useful data that they can use to run their business.

The need for corporate compliance and accountability has also forced large corporations to invest heavily in information backup, storage systems, and compliance solutions.

Some corporate mailrooms have benefited from the development of high-speed automation equipment

designed for moving physical mail more efficiently through the system.

However, the challenges are daunting, considering that most mailrooms are using one-piece-at-a-time visual identification and manual sorting methods developed over a century ago. At best, these mailrooms operate at an efficiency rate of 200 to 500 pieces-per-hour to achieve basic mail sorting. Identification, sorting and physical delivery of inbound mail relies in most cases on human memory.

By digitizing the incoming mail process, and indexing the documents on the fly, companies will not only gain control of their mail processes internally (no more efficiency losses, gaps in document control and loss of valuable mail data), but will have the opportunity to combine electronic mail formats (e-mail, fax) in the same document processing flow. By implementing a digital mailroom designed as a central platform for information, the organisation will bring rationality to mail processing and significant gains in productivity and customer service.

Impact of new Technologies

Software Technologies

Document Capture

“Document Capture” is the act of scanning paper documents so they can be archived and retrieved in their original image format. It is the most widespread imaging technology used by companies today.

Software improvements now make it possible to capture paper documents while importing electronic files and to process them together through the same production platform. Both incoming paper and electronic mail can now be archived together at the same storage location.

Another major change is the ability to scan documents from remote locations and to retrieve them through a web interface. This is known as distributed capture and provides many cost benefits to companies with multiple branch offices or remotely located staff.

Data Capture

Originally, forms processing technologies were only able to extract and validate data from structured documents such as administrative forms.

The improvements in OCR technology now make it possible to automatically extract all data from semi-structured documents (e.g. Invoices) – the technical acronym for this is Intelligent Document Capture (IDC).

For fully unstructured documents (e.g. legal contracts, customer correspondence, and white mail), it is not yet possible to locate and extract all information. However, technologies have improved enough to identify the document type and automatically extract key information that can be used to index the document and/or route the document to the right department or recipient.

Document Classification

Software using a graphical approach can analyse and classify mixed batches of structured or semi-structured documents in order to build a library of templates. Using this auto-generated library of templates, the software can then identify and extract data from any scanned document in a single flow.

This image-based classification approach, combined with a full-text analysis of certain documents (based on a keyword search), are the main technologies used today to process semi- or unstructured documents.

These innovative automatic classification technologies reduce the need for pre-sorting documents before the scanning process. As a result, companies receiving high volumes of paper mail can make significant cost reductions every year.

Workflow

Workflow applications enable electronic documents and information to circulate inside the company. They might have to manage very complex processes related to multiple locations due to the globalisation of companies. The increasing importance of security is another vital challenge.

One of the key developments in Workflow technologies is around making company processes and workflow processes more consistent in order to avoid organisational changes when implementing these tools. Although company organisations tend to become increasingly complex, these software solutions are becoming simpler in terms of implementation and interfaces.

Archiving

Due to the high volume of documents that need to be archived by organisations today, it is critical that the documents can be stored rapidly, securely

managed and quickly retrieved through a common user interface.

Documents can usually be archived on a variety of electronic storage media and easily retrieved through a Web interface (thin client).

There are many archiving solutions on the market today, some as a component of an ECM or Document Management solution and some as a stand-alone system specifically designed for the purpose of high volume, high speed archiving.

Document and Content Management

A document can be an image, a file stored and compressed in a tiff, gif or jpg electronic exchange format, or an MS Office file or a PDF file (Acrobat exchange format).

Content generally includes all the above combined with any data/information as well as other electronic files such as e-mails and web pages.

Content Management solutions need back-end repositories or databases (e.g. Oracle or MS SQL Server) to store the files and retrieval data.

During the last decade, these software solutions have benefited from the universal XML standard used to index, store and access files to and from any repository.

Relative to the others systems, content management systems manage more complex administrative, access and workflow rules in relation to the quantity of files and file formats it needs to support.

Evolution of Hardware

The range of hardware available to turn paper documents into digital images has increased considerably in the last 10 years. Although desktop scanners and multi-function devices (MFDs) are now very affordable and well suited to small office or departmental scanning requirements, the need for high speed, high volume document scanners is still evident. The speed, reliability and increased functionality of these high-end scanners can save considerable time and money in the long term.

Today, it is possible to scan documents of different dimensions and formats in the same flow, scan colour documents, sort them physically and read data from them using OCR and barcode technologies during the scanning process. Processing speed has also significantly increased.

This evolution, together with the existence of machines able to completely automate mail processing – opening envelopes, removing staples, scanning, sorting – play a significant role in the development of large volume paper processing such as mail processing.

The next step for companies is to rationalise their mail processing to be as consistent as possible with their organisational structure, e.g. choosing between the implementation of a centralised digital mailroom and the implementation of decentralised mail scanning facilities or a combination of the two.

According to a survey conducted by AIIM in 2007, just under a quarter of companies surveyed are operating a centralised scanning facility whereas almost half of companies are operating a distributed (both centralised and decentralised) scanning facility. The distributed scanning solution has the advantage of faster processing speed and a reduction in mail transportation costs, but has higher hardware and infrastructure costs.

Operating a Digital Mailroom

General Organisation

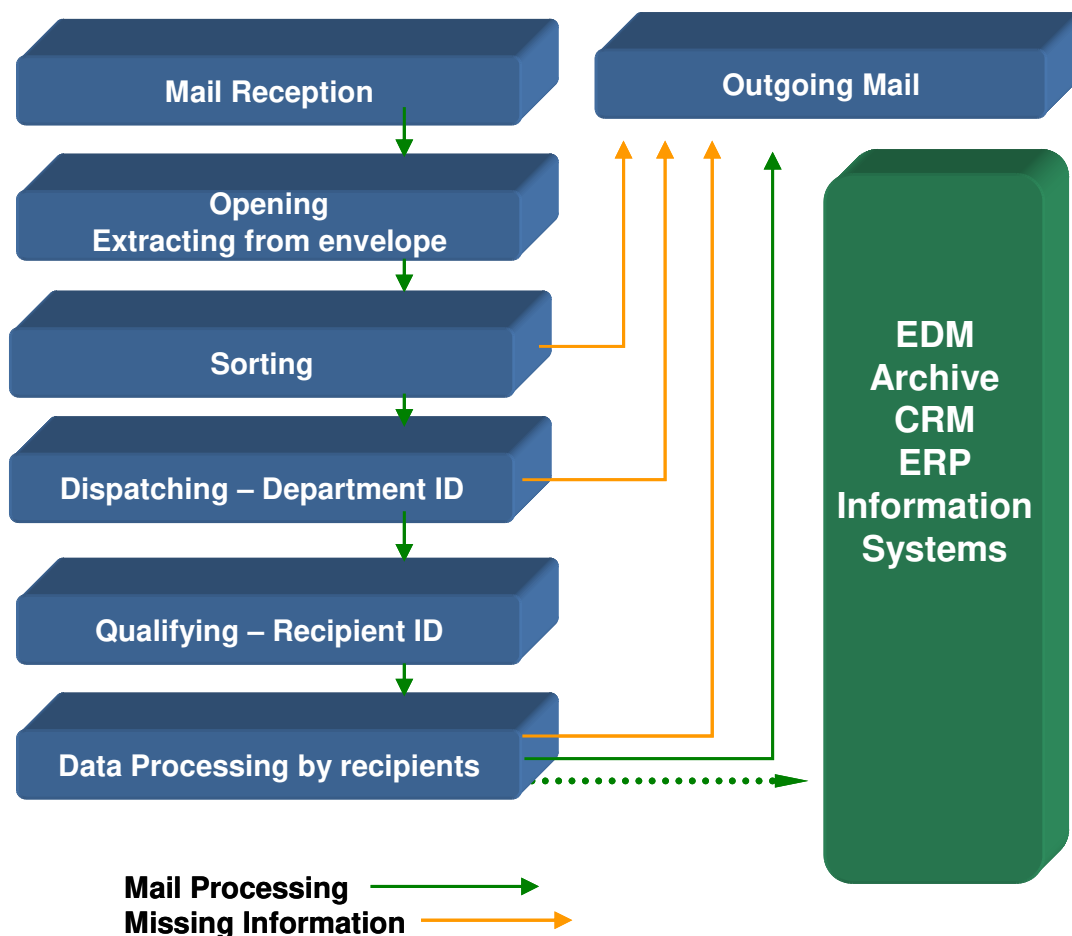
The combined evolution of document capture technologies and higher data transfer speeds has made the implementation of efficient, cost effective digital mailrooms possible. It now makes sense for today's companies to digitise the bulk of paper mail as soon as it enters the company.

Nevertheless, depending on the country or on the activity, companies may or may not have a centralised mailroom for their incoming mail. According to a survey by a leading high volume scanner manufacturer, only 17% of European

companies have implemented a centralised mail department.

In addition, some organisations will see the benefits of centralised mail processing more readily than others do. Insurance companies, Pension Funds and Government Agencies have been using document capture technologies for quite some time and have often been the first to implement such solutions.

Incoming mail is usually processed in the following way:



Following a thorough analysis of the company’s mail processing requirements, the provider of the digital mailroom solution will have to concentrate on the following critical points:

1. Managing multiple sources of incoming documents:

- *External* : mail, fax, email, web forms
- *Internal* : mail, fax, email, archives

2. Defining processing criteria:

- Recipient / employee location
- Dates of payment, time limit to process a document according to its type and/or date of receipt

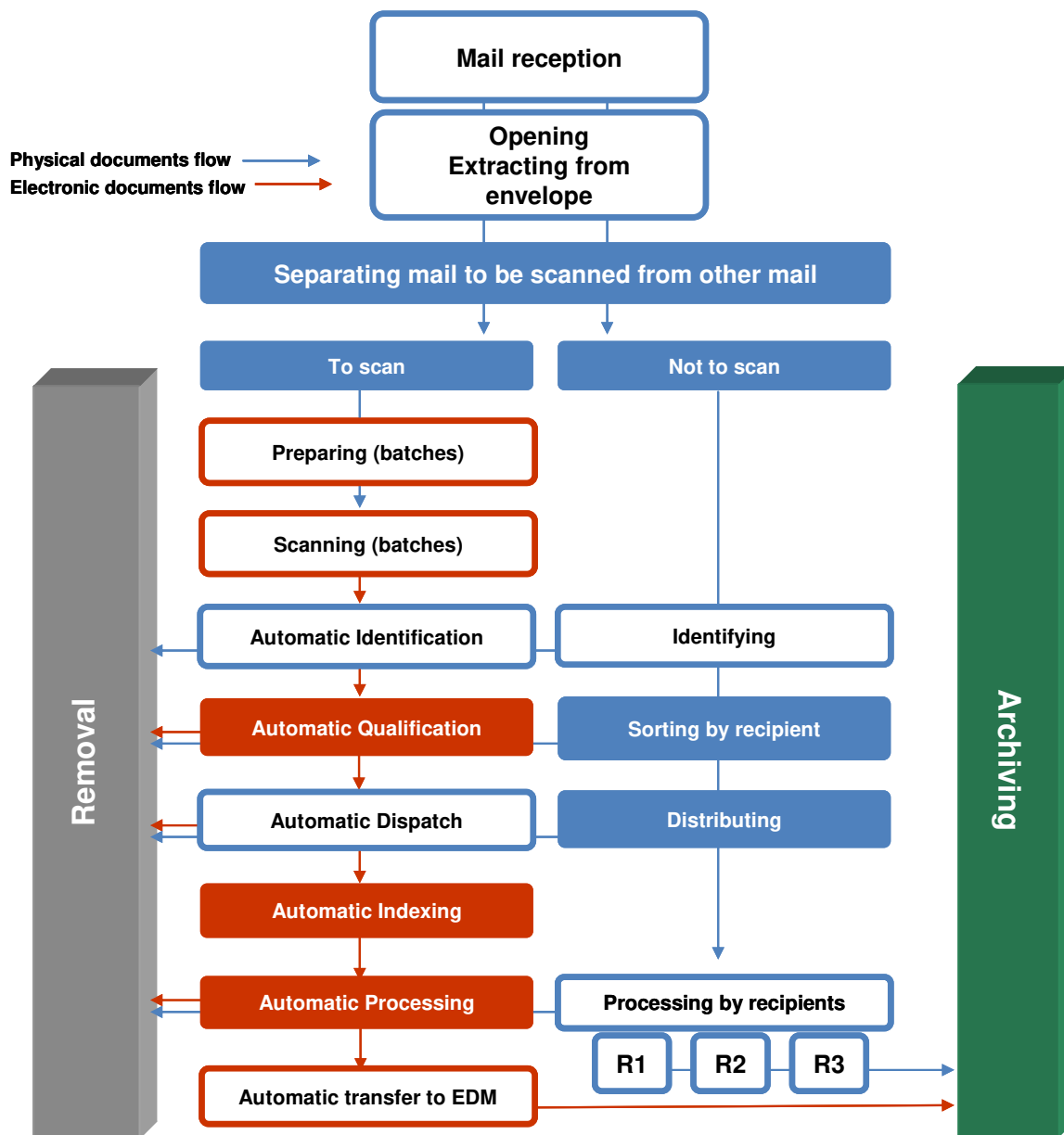
3. Guaranteeing data traceability

- *Sent by who?* i.e. which department is responsible?
- *To whom?* i.e. who is the person responsible for processing?
- *Why?* i.e. what is the type of request?
- *Status?* i.e. what process should be applied? Has the process been applied?

It is important to establish the processing and circulation criteria based on the type of document and the information contained within it.

Criteria	Mail	Electronic Document Management
Action	To be opened	Not to be scanned
	To be prepared	To be scanned
Geography	To distribute	To archive To destroy
Recipients	Customer services	To be scanned
	Accounting department	To be scanned
	General management	Not to be scanned
Process	Urgency status	Urgent
		Non urgent

The complete process, which can be adapted for each case, can be summarised as follows:



The identification stage consists of deciding which category the document belongs to, e.g. invoice, cheque, administrative form. This first stage is completed by a qualifying stage that will dispatch the document according to its recipient and through a predefined process related to the document itself (its type, content or urgency).

As shown on the diagram, physical and electronic process flows do not necessarily exclude one another. Certain steps such as identifying, processing or archiving of documents, apply to both paper and images. Other steps such as automatic qualification, dispatch and indexing of documents relate only to electronic files for companies operating digital mailrooms.

Benefits

Reducing the decision cycle

One major benefit of turning all incoming paper mail into images as soon as it is received, is the extent to which it shortens the decision cycle. Although it might be difficult to quantify exactly what the cost savings are, it seems an obvious advantage.

Digital mailrooms allow users to receive immediate notification of a document's arrival at the company. Employees can access images in record time, regardless of where the documents were physically acquired. Files can then be processed very rapidly according to their level of urgency.

Just as digital mailrooms facilitate the exchange of company information, they also facilitate the coordination of several people around the same document. The decision making process becomes quicker and more accurate.

Rationalising the circulation of information

The various technologies at the heart of digital mailrooms help companies rationalise their processes, e.g. it allows companies to reduce costs associated with resending documents between sites.

Reducing paper costs

Mailroom costs not only include staff costs involved in the distribution of letters, but also the costs associated with the resending, loss or deterioration of documents. A digital mailroom implementation has a direct effect on all those costs and becomes a key element of competitiveness for the company.

Another source of paper costs is the one associated with the physical storage of documents.

Encouraging employees "to do without paper" will quickly lead to the reduction in the cost of excessive printing and copying of documents. The aim is obviously not to ban paper from the work environment but rather to set up a new coherent and secure organisation that makes the use of paper superfluous.

Ensuring data tracking

Ensuring incoming mail tracking has become a necessity for the majority of companies, with compliance regulation being a major factor. The earlier a document is transformed into an image file, the more reliably it can be tracked throughout its life cycle. Furthermore, a scanned document becomes accessible by all authorised users (as a PDF, TIFF or JPEG file). The file created includes more than simply images; it references one or more documents in the archive database and records all the actions carried out by the people responsible for the file.

The security of the process guarantees the authenticity and integrity of the document, which aligns with the record management policy of the company.

Improving customer service

The electronic management of incoming mail improves the handling of documents within service oriented companies and agencies. It enhances the quality of the service offered to customers by allowing staff to instantly access customer files and answer questions immediately.

The improvement of customer service is considered to be of fundamental importance by the majority of companies. According to Strategy Partners, more than 80% of organisations, interviewed for a survey on digitising documents, said it was a major concern for their company

Business cases

If companies do not need to be convinced of the strategic value of a digital mailroom, they need to be reassured on one specific point; 43% of companies say they lack relevant information to allow them to make the case for return on investment (ROI). Combined with 54% citing lack of budget, it is no surprise that the number one factor impeding information management is finance. However, 60% of companies that responded to an AIIM survey on distributed scanning and capture, said that the ROI on these investments compared favourably with other information technology investments.

Business cases for this technology have been available for some time in Europe. Most of the public sector and some corporate organisations (Retail banks, Pension and Insurance companies, etc.) have already stepped into this new era of Information Management.

Information Sources

AIIIM Europe
By Line Research
Konica and Allgeier Computer
Strategy Partners
SWT

About Datafinitivity

Datafinitivity Ltd is a document management solutions provider specialising in document capture and archiving solutions. Based in Surrey, Datafinitivity delivers cost-effective, leading-edge document and data capture solutions for companies that need to improve the efficiency of business and document processes within their organisation.

This white paper was written on behalf of foxray AG to help promote the use of digital mailroom technology within public and private sector organisations.

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