



Digital Mailrooms:

How Document Automation
Saves Money
and
Enables Compliance

Introduction: The digital mailroom

The digital mailroom is the name given to a set of operational services that exploit the latest document capture and IT technologies to meet the everyday needs of companies whose business depends on processing paper and electronic information.

Just as conventional paper mailrooms provide the mechanisms to capture, prioritise, route and deliver incoming and outgoing paper mail, the digital mailroom is a set of functions that can perform and guarantee an expanded set of services that will provide enhanced service levels for email, fax, web pages, and text messages as well as paper communications. Crucially, digital mailrooms enable significantly greater speed and flexibility in business processes and security. They present line managers and their operational staff with the opportunity to save money and unlock the value of their IT systems to benefit their customers and internal processes.

In these recessionary times all organisations are being subjected to unprecedented pressure to meet regulatory requirements. This demands changes in the way incoming customer information is processed. We need to ensure that we can capture all incoming and outgoing correspondence to limit liability and promote the branding of the business.

Users face a new choice. They can either continue to pretend that all their data is already electronic or wait another ten years for the ultimate EDI, email and XML killer technology to cure the planet, or they can be pragmatic. They can adopt digital mailrooms to connect the real world of people, paper and processes and unlock their back office systems. Rather than acquiring and automating document services in silos that are different for every location and application, they can explore how to purchase and guarantee service levels by exploiting and integrating new digital mailroom approaches. In doing so, the user can make not only major savings through economies of scale, but they can also speed up the throughput and unlock the value of their existing IT systems.

Digital mailrooms have emerged from the coincidence of the Internet, faster and distributed scanning, state of the art recognition and automatic indexing software. These have combined with outsourced services, email, archiving, call centres, ERP, email and knowledge worker systems to create a new generation of digital mailrooms. In the Government and

commercial sectors, we will show how systems are being combined, as real-world operations staff have the advantages of multichannel approaches to gain measurable benefits, without major new investments or long term IT projects. In the real world, hard lessons have been learnt by early adopters that have integrated technologies, overcome real-world operational obstacles and mined the cost savings and business benefits of digital mailrooms.

Rather than re-learn the lessons of history, this introductory White Paper shows the features, advantages and benefits of the current best practice together with highlighting future opportunities for investing in digital mailrooms.

Functionally, what is a digital mailroom?

A digital mailroom is an integrated process-driven approach that comprises of:

- ▲ A software, hardware, and services infrastructure that manages all forms of incoming & outgoing communications
- ▲ A lower cost, flexible and regulatory compliant business utility
- ▲ Integrated processes that unlock downstream value
- ▲ A way of lowering cost
- ▲ A way to ensure compliance

Digital mailrooms are not all things to all men. They are:

- ▲ Not just about replacing wire baskets with an email inbox
- ▲ Not the same level for everyone
- ▲ Not just for Head Office; they impact every interaction with customers, staff, suppliers, regulators, investors and the public at large
- ▲ Not necessarily a headcount reduction exercise
- ▲ Not a technology push, but a series of service improvements pulled through for reasons of business efficiency, lower cost and increased flexibility

In the old days, mail was delivered to head offices only, by hand, sorted by hand, directed to the appropriate desk and opened in the order it arrived. It was processed in

that order, and physically transferred to a knowledge worker, as processes were manually initiated and tracked. Outcomes were determined once all the relevant papers were assembled. Fulfilment actions were carried out, i.e. to assign work to others, or respond using the telephone or personal letter. These actions are already pre-defined processes, which were written, the recipients identified, the letters printed, posted and dispatched.

The bottom line is that the actual enactment and decision time was in seconds and minutes, but the completion time was in days and weeks, even months, and the outcomes were paper archives that were easy to read but slow and expensive to store and retrieve.

Such approaches are now technically and operationally obsolete. They have been replaced by the digital mailroom - a new generation of technology and services that combine the legal and operational advantages of paper with electronic systems that exploit the latest Internet-based approaches.

Existing conventional paper systems are legal and they work, after a fashion. However, what if we could combine its value, strengths and reliability with the speed of IT and the Internet? The solution is the digital mailroom, which fulfils the need to keep the integrity but adds speed and scope to handle digital documents, consistently together with overcoming the challenges of dispersed businesses, increasing compliance and the demand for faster, reliable customer service.

Why Now? Convergence and Coincidence

Digital mailrooms have emerged because of the convergence of business pressure for cost saving and regulatory compliance, at the same time that key scanning recognition, indexing, storage and processing techniques have integrated and become easy to adopt and scale.

Business Reality: Let us start with survival...

'I believe that banking institutions are more dangerous to our liberties than standing armies.

If the American people ever allow private banks to control the issue of their currency, first by inflation, then by deflation, the banks and corporations that will grow up around the banks will deprive the people of all property until their children wake-up homeless on the continent their fathers conquered.'

Thomas Jefferson, 1802

'We are in the middle of an economic downturn which, to a far greater extent than any since the 1930s...Developments in the banking and near bank system which had been lauded as improving allocative efficiency and financial stability have in fact caused serious harm to the real economy. The changes which we need to make to create a sounder system for the future will be profound...' Adair Turner, Chairman, UK Financial Services Authority, January 2009

The quotes from both Thomas Jefferson in 1802 and Adair Turner in 2009 indicate that we face fundamental disruption to commercial life which will require innovative but risk-free approaches to cutting costs and doing more with less.

There is no doubt that bankers will not be allowed to operate in the same way in future, and the knock on effects of scrutinising all financial transactions will force all sectors to reconsider how they manage their cash.

New approaches to categorising risk, valuing customers, ensuring bills get paid at the right time, and assessing credit need to be faster, until the rating agencies re-establish their credibility. The latest digital mailrooms are underpinning a new generation of accounts processing services that enable businesses to capture and recognise all invoices, collect cash and determine payment terms, purchasing discounts and treasury functions.

A major retailer in the UK spent over £2m in 2006 on such a system and achieved a return on its investment in less than six months.

At a broader level, the experience and culture of using non-human systems to ensure safety in highly regulated industries such as railways, chemicals and nuclear power plants will need to be transferred to all other sectors. In those industries there is a regulated culture of studying hazards and risks that mandate locks on safety systems and analysis of where energy sources can cause accidents, explosions, contamination and adverse effects. In a similar fashion, we cannot rely on the occasional ad hoc examination of leases, contracts, terms, counterparty documents, cheques, company reports, stock market submissions and cash credits. The next generation of systems will need non-human intervention to examine every scrap of paper, email and its context and associated documents. If risks emerge that include incoming correspondence, digital mailrooms will be needed to capture, extract and value that risk. So it is not a matter of determining *if* organisations will need a digital mailroom, it is simply *when*.

The Storm of Global Regulatory Scrutiny

Companies have now begun to realise that their customers are not just located around the corner from them but can be anywhere across the planet. Globalisation and dispersed workforces mean that business communications are critical, and that conventional approaches to handling paper and electronic mail have to change. Email works fast but is plagued by spam and contains viruses. Worse, it is mostly insecure and can easily be repudiated. Therefore, we need to make email better, by adopting the proven processes that make our paper mail secure. The factors driving businesses to change and consider digital mailrooms include:

- ▲ **Focus on Core Competencies.** Whilst business communications are of strategic value they aren't a core activity. Digital mailrooms are proven examples of how non-optimised dispersed functions can be replaced by internal shared services or an outsourced service that can provide faster, cheaper outcomes by reducing the costs of complex non-core activities.
- ▲ **Better Customer Service.** By processing mail in hours not days, organisations can not only save money but reallocate these time savings to turn their customer communications into a differentiator. Organisations can move their priorities beyond: "Have we lost the letter?" to "What do we know about our customers, what do they think of us?"
- ▲ **De-regulated Postal Services.** The UK is leading the trend to de-regulate postal services across Europe. Retail and FMCG businesses realise that their priority is clean customer data, not paper. So the benefits of local capture and scanning are not only of lower costs but also the reduction in the number of white vans filling our motorways.
- ▲ **Terrorist Threats.** Many organisations have faced terrorist threats in the past, and still need large budgets for contingency plans. Digital mailrooms capture all correspondence and allow distributed working. They exploit low cost distributed storage and file hosting, so that the impact on operations can be minimised in the event of major head office disruptions. They can replace a costly IT-only "hot standby" with everyday operational resilience for all of the company's business documents.
- ▲ **Unintended operational consequences of technology.** Digital mailrooms also enable organisations to re-establish their priorities and regain control of informal customer communications. For example,

electronic mail is backed up in most organisations, yet over ninety percent of the content of email, fax machines and mobile phones is junk and an audit nightmare. Digital mailrooms provide classification and can sort out the mess. Through the introduction of the latest generation of scanner (allied with automatic recognition and indexing) digital mailrooms have now largely overcome the costs of paper capture and archiving.

Technology Triggers for Digital Mailrooms

Successful Science is Indistinguishable from Magic...

The technology enablers of digital mailrooms have crept upon most managers without them realising the major advances that have taken place in the last three years. This is because they are not as sexy as Web 2.0 and are not often promoted by the major IT vendors. The technology triggers include:

- ▲ **Intelligent Everyday Centralised Scanning.** Mailroom scanners can now handle, sort, de-skew, recognise and audit incoming mail and improve and de-skill paper handling enormously. The operational irony is that most existing paper mailrooms already perform the hardest task - sorting and opening white mail and removing some of the numerous catalogues, before placing them all into wire baskets and trolleys. By contrast, in modern digital mailrooms, the latest high volume scanners can not only open and sort mail, they can complete the task - scanning, indexing, routing, and even shredding.
- ▲ **Distributed Scanners.** Central mailroom performance can be augmented by bringing the scanner to the local office, not the mail to head office by exploiting Multi Function Devices (MFDs) - what used to be the photocopier in the corner or the office fax machine. By combining the latest identity management ("I know who is scanning this document") without them having to enter ten passwords and integrating with business applications, all mail does not have to be sent to head office. Instead, businesses can capture customer correspondence and requests at every counter, desk, hotel, airport, shop.

Construction sites can already take a delivery note from a lorry driver at the gate and provide an answer in six seconds as to whether the right loads or the right quality is arriving and at the right time, together with details of where to store the items in question. Just start to worry when you approach your office copier and its groans at you, "Not more expenses...!"

- ▲ **Intelligent Document Recognition.** IDR delivers for 80% of documents what all users want: automatic identification of the index fields (without the need for unnecessary typing into grey boxes with funny syntax). IDR can recognise document formats such as an invoice, a CV, a form, a photo, a passport, a cheque. This makes document management a whole lot easier. It is clever in that IDR identifies and rejects the documents it cannot index (so called “false positives”). IDR reduces typing and data entry by four fifths. For an average accounts clerk that nearly doubles the number of incoming invoices that can be scrutinised. For mere management mortals, it means paper, mail, and email can appear in the same inbox on the same day and be read and prioritised in real time. Paper is no longer a slow second class citizen, trapped in a far off in-tray.
- ▲ **Document Classification and Routing.** Digital mailrooms can then exploit the existing IT, network and email infrastructure of an organisation to route paper-based information, just like any other email, fax, EDI, and direct data entry at a call centre. Organisations, not just individuals, can know what each letter and email is worth, and where to send it.
- ▲ **Off the Shelf Integration with ERP.** Digital mailrooms can also enter accurate data directly into the processes of business systems and initiate processing, matching supplier details to orders. It helps organisations automatically route and integrate incoming post and helps them to process it, using off-the-shelf products, without a nine month IT project.
- ▲ **Widespread Content Management.** The relatively low cost of Microsoft SharePoint, Google Docs and Open Source content management systems means that the techniques originally developed for high value pharmaceutical drug applications can now be deployed for everyday business information. As IT departments slowly accept that shared drives with limited metadata are not the answer to successful information re-use and archiving, digital mailrooms can exploit the structure and audit control that everyday content management provides.
- ▲ **The Emergence of Shared Services.** There is a significant difference between today’s project and annuity document outsourcers and the scanning bureau of yesteryear: primarily the focus is on value, not quantity. In the old days, scanning bureaus scratched around

for every penny and quality was often an issue. Digital mailrooms within an internal shared services bureau and outsourced service providers can capture the post at 6am, scan, recognise, index and present clean data and metadata by 9am, backed up in a secure multi-site archive, every day. They can manage that securely, at a service level users can define.

- ▲ **Improved Multichannel Output Management.** Digital mailrooms’ not only process incoming correspondence but also manages outgoing mail which is an equally crucial part of the information supply chain provided it has the customer at its centre not internal systems.
- ▲ **Mailrooms replace Long Winded Application Integration.** Even the most ardent ERP system manager will admit that is difficult to connect ERP systems together. The great thing about XML standards is that there are so many of them. Of course EDI, XML and EBML will make a big difference, but in the meantime, mail systems can provide pre-recognisable electronic invoices without the need for never-ending IT integration projects that are rarely worth the time and effort (as some systems change faster than you can integrate with them). Digital mailrooms do not require an IT strategist, multiple middleware connections and “Wait until the next EDI standard or the next or postponed SOA/ Office2007/ NetWeaver/ Fusion/ Mobile/ Web 2.0/iPhone/Open Source/email/database upgrade...” Digital mailrooms can be implemented in days, and external services are available in hours.

The Business Benefits of Digital Mailrooms: Unlocking Downstream Value

All incoming correspondence is not the same. In the Government sector, it has major implications under the Freedom of Information Act. In the finance sector, it adds to your knowledge of the customer and therefore is subject to regulations such as MiFID, which demands that you assess the client’s ability to understand the product before it is offered. In retail, it means there is an order, time to pick and dispatch. In manufacturing, it directly impacts the supply chain and manufacturing processes across multiple sites. In life sciences it may force a drug trial or research project to stop or start. For charitable NGOs in war zones it may mean: “do not drive up that road, it is mined”. Each input adds to corporate knowledge but as a Hewlett Packard employee famously said: “If HP only knew what HP knows.” In short, incoming correspondence is the start of corporate knowledge management of any organisation.

Finance

How can you provide a 360° view of your customer if your products and communications are managed by dispersed staff and IT silos? We know what we have; we know how to limit risk. Alternatively, as notoriously quoted from an internal memo in Goldman Sachs: "Never write anything in an email you do not want to see on the front page of the newspapers".

When Allied Irish Bank's USA subsidiary used a single fax machine in 1996 to accept all trade confirmation for currency exchange, one trader who sat next to the fax machine cost the Bank millions by hiding the only printed confirmations and running his own book.

Local Government

Strategy Partners' primary market research of UK Local Government in 2008 revealed that the average local authority has at least five different document management systems. Each of these systems has people scanning into it, believing their requirements are unique.

One wonders how the numerous 'one stop shops' really perform if they cannot reproduce incoming correspondence that is usually locked in cabinets full of case files, council tax folders, parking tickets, education officers application folders and housing benefits claim forms.

Digital mailrooms not only enable Gershon-level savings, they enable critical functions like Social Care to avoid losing files.

Central Government

The big bug-bear of central Government and agencies is the plethora of Freedom of Information requests they must answer. These require finding information across multiple locations, in several formats, within the timescales and costs mandated. Digital mailrooms enable an archive of incoming mail to be recorded, so at least they know what they have received. Whether they reveal it to the mere citizens is another story.

Several successful PFI projects such as Teacher Pension Administration have shown that it is possible not only to receive all incoming paper mail cost effectively, but answer queries with two days - unthinkable performance compared to the previous generation of manual letter opening and answering.

Retail – Revolutionise cash management

The value of digital mailrooms to revolutionise recruitment processes and accounts processing has been proven extensively, particularly in Scandinavia.

Many business managers have realised that spending more money on upgrading major ERP systems provides a four or five year payback, whereas digital mailrooms can deliver a return on investment inside twelve months, so the key question to most CEOs is: "Do you want to spend another £1m on ERP, or lower costs by 40%?"

Construction - Managing Costs On Site

The credit crunch has shifted the critical technology for construction from Computer Aided Design to cost engineering, as digital mailrooms underpin the latest approaches to factoring payments and discounting purchasing.

These approaches enable suppliers to select whether they want payment today at a discount, payment in a month as standard, or payment three months at advantageous rates.

As the banks are not lending, digital mailrooms help builders manage their cash to suit the climate.

Manufacturing – Better communication leads to better purchasing

Digital mailrooms would not be needed in manufacturing if the promises of EDI and XML had been delivered. In reality ERP vendors have a vested interest in ensuring that their systems do not connect well to those of competitors, and substitution remains an anathema.

The latest generation of fully integrated ERP suites looks an unproven and an expensive luxury in these recessionary times. In practice, about thirty percent of supply chain information comes in by paper mail, so digital mailrooms can provide speed of capture that matches the Kanban/Just in Time/Lean Sigma process metrics demanded in supply chains.

Travel and Transport

Airlines and other transport companies have been early adopters of outsourced digital mailrooms, to help them respond quickly to customer complaints, recover the cash from tickets and recruit staff whilst keeping focus on branding and operations.

There are examples of digital mailrooms across all industry sectors as well as in legal, human resources, accounts and administration. There is no need merely to promote the advantages of information in a physical form that is easy to read, transportable, does not use batteries, solar

powered, handles any language, does not need an internet connection, is easily written, does not require additional training, cannot be easily altered, legally binding and is proven to be biodegradable and can be re-used.

Potential Pitfalls for Users (and Vendors)

Digital mailrooms are not rocket science. They have assisted the breakthrough technologies described above, but the most effective advances have been in operational processes, that have evolved from the practical experiences of early adopters. As experience is what Oscar Wilde called everyone's mistakes, it is worth listing a few real-world pitfalls:

- ▲ **Over-Promoting a single technology.** Digital mailrooms are not the killer apps for everything from SOA to laptops. They combine technologies but they are not a technology race; it is a safe sex computer-based service.
- ▲ **One size does not fit all.** Although most organisations accept and process mail in the old fashioned way, specific care needs to be taken in legal, human resources and accounts, to prove fraud and keep correspondence confidential. This is catered for by smaller distributed systems that can be operated by vetted staff, which can exploit the rest of the digital mailroom infrastructure. Expect special cases who wish to preserve their role, hierarchy and pecking order amongst clerical staff, but do not let them stick to old fashioned processes.
- ▲ **Avoid the Big Bang.** Start with what you can control, involve those impacted and then expand and invite others to join.
- ▲ **Avoid Doing Nothing.** The rules for ensuring this and their avoidance are humorously described by Peter Jay's book "Yes, Minster" by the legendary Sir Humphrey's Rules...
- ▲ **"It's not my job..."** Digital mailrooms impact IT, Office services, Compliance, HR, Legal and the Executive office. It requires a multi-functional team that is committed to a shared successful outcome.
- ▲ **"Been done before, doesn't work..."**, but not using today's proven technologies, shared services approaches and outsourced services where appropriate.
- ▲ **"Now is not the right time..."** If the opportunity to ensure compliance, save costs and improve customer service in the current economic climate is not compelling enough, one has to question when the right

time is. We cannot afford to wait to survive nor disappoint the Regulator.

- ▲ **"The Prime Minister / CEO wouldn't like it..."** With the current reality of other demands on scarce company capital, digital mailrooms are one of the few initiatives that require little or no capital expenditure yet increase the effectiveness of any organisation particularly where it affects customers. Of course the features, advantages and benefits need to be articulated, but doing more with less is surely something the CEO wants.

The Digital Mailroom is not just about Capturing Incoming Mail

There is little point scanning in incoming mail, automatically classifying millions of emails and sorting out the mess that is fax, EDI and web enquiries, if organisations cannot exploit the downstream processes that can benefit from faster and auditable access to customer correspondence.

Digital mailrooms are not the end, but the start of an opportunity to apply process rigour to their supply chains, product development and 360° views of customers. In most cases, saving a couple of days on the front end of a process reveals how inefficient some of the other stages really are, that have been hiding behind mail inefficiency.

Digital mailrooms are not a luxury or a single project. They are a journey towards the removal of the "grunt element" of business communications. They are the key to unlocking the next level of value.

Within five years, regulatory and cost pressures will ensure all incoming "business communications" will be classified, valued and processed electronically (and physically) to a variety of geographically & dispersed locations. The response will be automatically generated where possible, as demanded by customers, regulators, suppliers and consumers.

Therefore, you, the management of the business, can focus on core competences and adding value.

APPENDIX: ABOUT STRATEGY PARTNERS

Strategy Partners is an established research based IT advice business that specialises in application software and services markets across Europe. We carry out the most detailed market research and analysis available in Europe in the key areas of

- ▲ Document Capture and Imaging
- ▲ Content Management
- ▲ Document and Records Management (EDM)
- ▲ Business Process Management
- ▲ Output and Print Management
- ▲ Compliance and Business Applications
- ▲ Enterprise Software and Outsourcing

As an authoritative independent source of market intelligence, we empower buying organisations in the Government and commercial sectors to negotiate with vendors to make the technologies 'safe to buy'. We understand the purchasing process and know how to speed it up safely, not slow it down. We help users to plan implementation and show how to measure and extract benefits.

Strategy Partners has offices in the UK, Netherlands, Germany, Switzerland, and California.

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