Efficient Compliance, Effective Sharing through Automated Archiving

AUTOMATED ARCHIVING SATISFIES MANDATES AND SIMPLIFIES SHARING

WHITE PAPER
Executive Summary

The challenge of responding to regulatory mandates and business demands has driven many organizations to rethink their archiving techniques as well as re-examine key business processes. Capturing and storing information often becomes a burden, especially if tied to manual processes. In comparison, the value of this information becomes a true asset when it is automatically captured, distributed, and stored as part of an organization’s document workflow with minimal end user impact.

Viewing an organization’s workflow from a system level, it is clear that data originates from a variety sources and is stored in a mix of proprietary and open-standard formats. This paper examines the techniques for capturing and cataloging information in a form that can be freely circulated, searched, and assembled to meet regulatory mandates—automatically and efficiently.

Automation adds consistency and efficiency to typical document tasks. This is especially true when existing processes have relied on particular individuals to select the correct documents, archive them using the most effective tool, store them in appropriate locations, and tag them for reference and searches.

A more effective way of managing these processes is to use a centralized, system-based approach that provides a rules-based model to intelligently automate operations. Handled this way, archiving no longer represents a necessary evil—instead it becomes a natural, transparent aspect of system operation, handled invisibly without human intervention.

TARGET AUDIENCE

This paper covers topics of interest for CIOs, IT professionals (including system architects, developers, and system administrators), information management professionals, archivists, corporate librarians, and business strategists.
Contents

Executive Summary .................................................................................................................. 2
Envisioning the Archive as an Asset for the Future ............................................................... 4
Why Automate Archiving? ................................................................................................. 4
The Persistence of Paper-Based Archiving ........................................................................ 5
Driving Business Value through Automated Archiving ....................................................... 5
Streamlining the Document Workflow for Automated Archiving ....................................... 6
Centralized Rendering in a Multi-Repository World ............................................................ 7
Real-World Archiving Scenarios across Multiple Industries ................................................. 8
Adlib’s Enterprise Solutions for Automated Archiving ...................................................... 9
Envisioning the Archive as an Asset for the Future

Organizations increasingly recognize that an intelligent archive—one that helps automatically capture, classify, and manage the content vital to business operations—provides an important resource that goes substantially beyond simply meeting regulatory or record-keeping requirements. The archive itself can be a genuine asset to the entire organization if the information it contains can be accessed by anyone in the organization who might benefit from it. To accomplish this, the archive needs to provide information in a common, standardized format that is searchable and easily accessed. As organizations evolve from using paper records to using electronic records, the Portable Document Format (PDF) has become the common information storage and transfer medium. PDF/A (a constrained version of PDF version 1.4), maintained by the International Standards Organization (ISO), was specifically developed for long-term archiving. It includes built-in capabilities for maintaining document fidelity, ensuring accessibility across platforms, incorporating indexed searches, and accommodating related digital content that is often necessary for archival storage.

The utility of an archive depends on how easily information can be located and extracted from it, as well as how easily the archive itself can be created (optimally, as an invisible process carried out in the background). Another important factor is establishing a common format to increase accessibility. The advantages of using PDF/A for a common format are that it can be indexed, made more accessible through metadata, used to capture images, and even made searchable through Optical Character Recognition (OCR) functionality.

Why Automate Archiving?

To move beyond the limitations of paper-based archiving, as well as the problems of poorly coordinated digital processes, organizations need to consider archiving solutions that fit neatly into their employees’ daily workflow. Ideally, an archiving solution should carry out operations silently and invisibly, using automation wherever possible. Reasons to archive documents as part of a consolidated, automated process include the following:

- To more efficiently capture and store business records in a form that meets the regulatory requirements of the industry sector in which they operate
- To ensure continuity of business processes across the organization and to maintain an auditable trail of transactions and activities—without risks of human error or incomplete record keeping
- To gain the cost benefits of streamlining the archiving process and of moving away from a scattered, individualized effort performed manually by office workers
- To prepare for organizational growth by putting in play a solution that will support large-scale archiving as the need and requirement increases over time
• To develop and deploy a systematic method—through the automated archiving process—that uses metadata and advanced search technologies to more efficiently index and catalog essential information of value to everyone in the organization

• To capture the output of applications used in everyday business—such as email apps and presentation tools—in a form that serves both regulatory mandates and common-sense record keeping

THE PERSISTENCE OF PAPER-BASED ARCHIVING

The vision of the paperless office has been around for decades but realization of this vision has been hindered by many obstacles—some technological and some based on human work habits. In a survey¹ conducted by AIIM (Association for Information and Image Management), some relevant findings shed light on the shift from paper to paperless workflows:

**Speed of response:** Eliminating paper from business processes would accelerate responses to customers and staff members by a factor of 4.0x to 4.6x.

**Process inefficiencies:** 33% of the organizations processed electronic documents and forms; 20% printed out documents; 13% of those organizations that printed re-scanned the documents back into the repository.

**Quick payback:** Of those organizations adopting paperless processes, 67% reported a payback within 18 months, and 50% saw payback within a year.

While most companies recognize the advantages of paperless initiatives, there remains a disturbingly low rate of implementation. Almost half the reporting organizations had only made 5% progress toward paperless workflows, and 18% had not even begun the transition.

The heterogeneous nature of documents and repositories can interfere with a paperless workflow and cause many complications: inability to locate specific information in digital archives, unreliable archiving process, multiple format handling, regulatory compliance, etc. Advanced Rendering addresses these issues and is a key feature of successful archiving programs that bring organizations closer to a paperless future.

Driving Business Value through Automated Archiving

End users and even some executives approach archiving as a necessary evil within the organization—it is an indispensable but grueling task to implement, and difficult to maintain

in a consistent way. The necessity of supporting long-term business objectives and meeting regulatory mandates is inarguable, but to become a genuine asset to the business, archiving requires the addition of intelligent automation. An organization's IT professionals are challenged with merging the archiving process automatically with everyday operations—silent and invisible and always operating in the background.

The goals of intelligent, automated archives are:

• To streamline IT operations
• To save time and money
• To capture and collect archival items reliably and consistently
• To simplify the requirements of regulatory compliance

The need for large-scale document transformation and long-term archiving is likely to increase with the growing reliance on digital business processes, computer-based record keeping, and e-commerce transactions.

In industries such as financial services, life sciences, energy/utilities, manufacturing, and government, the scale of information generation continues to grow at astounding rates (with approximately 35 petabytes predicted to be in circulation by 2020). Within this environment, the efficiency of automated document conversion has been shown to reduce the time required for archiving and storing the output of typical workflow processes to as little as 10% of the time required for manual compilation.

While some present-day archiving solutions rely on manual generation of documents from desktop machines and laborious assembly into collections, this approach is not viable for the long term. To meet large-volume demands, an automated approach to archiving is required that operates consistently across an organization’s infrastructures.

**Streamlining the Document Workflow for Automated Archiving**

Figure 1 dramatically illustrates the advantages of removing complexity from the archiving process by adopting a common format and automated workflow.

The “Before” example in the figure shows how documents in a non-automated workflow must be collected from diverse systems and applications. This is often done from the desktop; it is often a slow, unreliable manual process, prone to human error. The subsequent tasks are also often performed manually by one or more individuals. The archived output may be directed toward two separate locations: either a file repository or a mix of printouts for filing, a digital database, and submissions to ensure that regulatory mandates are met.
An automated workflow, shown in the “After” example in Figure 1, folds the individual tasks into a single process, handled digitally and automatically. New or modified documents are detected through monitoring and, based on rules, converted into appropriate output formats. When necessary, digital signatures are affixed, which is an essential step in many compliance scenarios. PDF or PDF/A outputs are enhanced with additional information if required—including metadata and watermarks—and sometimes added to collections for cataloging. All of these documents can be sent to a centralized, shareable repository where they become an asset for the organization, searchable and accessible by any authorized individuals in the company.

**FIGURE 1. NON-AUTOMATED AND AUTOMATED WORKFLOWS**

By removing human interactions and automating the document workflow, operations become more consistent, time-consuming manual tasks are eliminated, document output can be carefully configured to meet compliance guidelines, enhancements can be affixed to documents to improve searches and accessibility, and the long-term availability of the information—thanks to the PDF/A format—is preserved.

**Centralized Rendering in a Multi-Repository World**

Given the increasing business and regulatory demands for archiving, many organizations find that their content needs to span one or more Enterprise Content Management (ECM) systems. While many organizations strive to adopt a single-vendor ECM suite for consolidation, an
AIIM report—*ECM Content Migration—Best Practices in Document Archive Convergence*—indicates that 54% of the respondents surveyed still had 6 to 25 distinct ECM or document repositories, many with duplicate entries and significant overlapping.

Archiving in a complex environment that has multiple, duplicate systems is a challenge. One effective approach is to automate the capture and storage of data in a common format, such as PDF or PDF/A, through a centralized rendering solution. While this does not eliminate the redundancy from multiple repositories, focusing on a common document format/process can help mitigate the massive IT effort involved in migrating to a single ECM product. Moreover, this document-centric approach addresses the underlying content that end users and business leaders are typically more interested in.

Having an Advanced Rendering solution that can be integrated into multiple ECM systems, as well as core business tools (ERP, CRM, workflow, and PLM) is a critical consideration for a successful automation effort.

**Real-World Archiving Scenarios across Multiple Industries**

Organizations can benefit from automated archives, which can be a resource for more efficient business processes and improved collaboration among clients, staff members, and partners, as well as the foundation of best practices for regulatory compliance. Areas where automated archiving of records and data can enhance business operations and improve compliance with regulatory laws include the following:

• Archiving legal documents related to case information so that communication exchanges can take place among firms, clients, and the court system
• Providing secure, searchable archived records in the financial services industry to comply with Sarbanes-Oxley and other state and federal regulations
• Maintaining long-term government and agency records as a part of routine archival storage, such as is accomplished by the National Archives and Records Administration (NARA) and Library and Archives Canada (LAC)
• Collecting and distributing information requested by the public as part of the Freedom of Information Act (FOIA) to meet applicable disclosure laws
• Storing information on patent submissions as a record-keeping function for pharmaceutical companies; long-term archives represent a valuable asset for references, data searches in the event of drug recalls, or for future repurposing
• Processing and archiving the content of invoices, whether directly through electronic transactions or through scanning and OCR, to provide improved customer service and ensure more systematic record keeping

• Capturing and distributing information stored in legacy systems or applications going out of service so that workgroups and departments will have access to vital materials from a shared archive in the future
• Creating long-term archives for long-lived construction, manufacturing, and infrastructure documents commonly found in the airline industry, building trades, transportation sector, and city planning departments

Although any of these scenarios can be implemented manually, they can all benefit from a more streamlined, automated approach.

**Adlib’s Enterprise Solutions for Automated Archiving**

Since 1998, Adlib has been engineering solutions for automating the large-scale transformation of business documents into accessible, high-fidelity PDF files. Expertise in PDF generation and use is a core capability of Adlib, and over 5,500 companies have deployed Adlib solutions to perform document-intensive operations and cut costs through automation and intelligent archiving.

Across industry sectors worldwide, enterprises and government agencies have adopted PDF and its archiving-specific offshoot, PDF/A, as the most effective means for converting documents from a variety of systems and applications to a standardized, accessible file format. Adlib’s depth of experience in Advanced Rendering has always centered on efficiently and effectively producing full-featured, compliant PDF files through deep integration with existing applications and platform architectures. The enterprise-grade, service-oriented architecture (SOA) at the heart of Adlib solutions was deliberately developed to support large-scale document conversion and automated workflow processes. Solutions are crafted to support the tools and technologies in use, regardless of the nature or complexity of an organization’s infrastructure.

As a member of the PDF Association and an active participant within their PDF/A Competence Center, Adlib continues to track these developments and enhance solutions to take advantage of additional functionality and new capabilities wherever possible. Adlib supports all ISO standards of PDF/A including parts 1, 2 and 3, and conformance levels a, b and u.

Adlib is committed to delivering exceptional solutions for automating document archiving at the enterprise level. Their technical prowess and industry experience ensure solutions that integrate with existing repositories, work reliably, and effectively automate the content archiving process.
Adlib is the leading expert in document-to-PDF conversion, enabling the world's largest organizations to improve the efficiency, quality and control of document-intensive business processes to optimize productivity, mitigate risk and reduce costs. As the trusted technology provider to Global 2000 organizations, Adlib brings over a decade of expertise supporting more than 5,000 international companies and government organizations to help them reduce the financial exposure and risk of non-compliance with regulatory agencies; reduce IT costs by centralizing document conversion; and leverage document-to-PDF as a shared service across the enterprise. Adlib is a proud Microsoft Certified Gold Partner and a member of the PDF/A Competence Center. For more information, visit www.adlibsoftware.com.