Systems Automation:



ith executive management's buy-in, information technology (IT) and records and information management (RIM) professionals can collaborate to execute systems automation solutions that mitigate risk. An organization's legal/regulatory requirements, based on its business mandates, can be synchronized with automated processes, which is a crucial benefit in our dynamic, global business environment.

Further, automation can transition paper-based RIM tasks to an efficient, digitally focused environment where activities require fewer personnel and less time to complete. The international case study presented

in this article offers an example of a manufacturing company's efforts to move from paper document processing to a web-based, digital platform using an automated systems solution.

Making the Case for Automation

RIM-related risks can take a variety of forms, including the following:

- Failure to preserve needed documents for litigation
- Incomplete or nonexistent procedures for the use of document
- Untimely or accidental destruction of documents
- Lost documents
- Inappropriately indexed documents

- Security breaches
- Obsolescence of document formats or media
- Outdated or incomplete retention schedules

Automated system solutions can improve document flows and enhance an organization's compliance with its RIM requirements and with industryrelated legal and regulatory mandates. Risk is mitigated when proper systems and solutions are enacted.

When the manual, hands-on steps of a task are replaced by a systemized, automated process, streamlining can occur. Generally, more output can be achieved with less input. In a paper-based environment, the physical touchpoints where documents are

handled, duplicated, stacked, and stored can be numerous. Each touchpoint represents a potentially riskladen event. For instance, a document can be ruined by careless handling, it can be misplaced in a disorganized cabinet, or its sensitive information can be revealed to prying eyes as it lays on a desktop. By reducing the number of touchpoints, the opportunities for mishaps decrease.

Exploring the Benefits of Automation

Benefits of document management via automated systems include the following:

- A comprehensive audit trail that includes essential metadata capture; reports can be ordered on an ad hoc or regular basis
- Automatic archiving and indexing of documents following the creation of each scanned, digital
- Automated version control
- Digital conversion and migration to maintain file accessibility and usability despite evolving technologies
- Improved document security through the use of digital safeguards on a system-wide basis (e.g., encryption and virtual private networks (VPN) for remote access)
- Faster turnaround time for process-related revisions to accommodate changes in the legal and regulatory climates
- More robust lifecycle management with the inclusion of retention schedules as part of the systems platform design
- Fewer human errors due to less physical handling of documents
- Time savings from faster document processing due to less physical handling of documents
- Fewer staff members needed to perform document processing tasks due to less physical handling of documents

- Quality enhancements related to the use of a consistent, standardized process, regardless of staff changes
- Greater options for scheduling flexibility offered by a web-based solution so that telecommuting is feasible
- Cost savings in the long term as document processing requires less labor and time and fewer employees

tinuity, an automated systems solution for document management can bolster these essential components and reduce risk in these areas.

Collaborating with IT, RIM can integrate digital file backups into a solution that recurs consistently within a unified platform. Today, external storage for backup materials is often in the cloud, providing a risk-tolerable, scalable option for many organizations.

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Other Helpful Aspects of Systems Automation

Organizations can use systems automation to track operational metrics. Because many metadata elements are routinely captured in these systems, it's possible to investigate specific components of an operational procedure by selecting unique elements for report generation.

For example, in a post-reorganization scenario, it might be helpful for an organization to examine metadata associated with documents managed by a newly staffed contracts department. It would be possible to determine the amount of time spent on each document by each responsible individual, revealing the efficiency of the process flow from start to finish.

Often, metrics-related reports can be regularly scheduled for creation (i.e., automatically generated by the system) or can be programmed on an ad hoc basis. Careful analysis of these reports can uncover quality improvement areas that lead to cost

While an effective RIM program includes policies related to backups. disaster recovery, and business con-

In addition, disaster recovery and business continuity can be aided by an automated systems solution that incorporates parallel processing capabilities in an offsite location, far removed from the organization's main base. Mirroring or shadowing techniques also may be deployed to aid with the speedy resumption of business activities in case of disaster.

Potential Drawbacks

For most organizations, the benefits of systems automation (especially in controlling risk) outweigh the downsides. But there are several issues to consider before embarking on such a project. This list has examples of project-related variables that could have a negative impact if care is not taken during planning:

- Cost, such as for consultant fees, vendor fees, and hardware
- Inadequate planning that results in a disappointing outcome
- Disruption to the business while the project is designed, finalized, and implemented
- Insufficient executive management buy-in for the project
- Inadequate training to educate staff at project completion

Case Study from a **Global Manufacturer**

A corporation in Asia with a large manufacturing hub in western Europe designed and implemented a customized systems automation solution to reduce RIM risk. The corporation wanted the solution to re-engineer a paper-based invoice processing procedure.

The handling of thousands of paper invoices each year had become a drain on time and labor resources. In addition, the antiquated "paper shuffle" brought with it a level of RIM-related risk deemed unacceptable. Executive management approved the project. An external consultant provided design expertise and project management.

Front-end planning was crucial. Stakeholders from many departments were consulted: accounting, executive management, IT, legal, and RIM. It was particularly important for the solution to be compatible with the organization's enterprise resource planning (ERP) tool. It was decided the solution would be a customized, add-on application for the ERP tool.

Stakeholders examined the steps of the invoice processing procedure:

- Receipt of paper invoices by the accounting department
- Routing of each paper invoice to the appropriate group where cost center and general ledger account numbers are assigned and the receipt of the product or service (associated with the invoice) is confirmed
- Approval by management for release of payment
- Entry of invoice payment data into the ERP tool

Several areas of risk were identified. Most of the risky behaviors concerned the deployment of paper copies during processing. The security of invoices on desks or in briefcases was at risk. Documents could be lost or misfiled. Ink stamping sometimes rendered data illegible. Confidential information could be disclosed through negligence or carelessness. Further, the timely processing of such a large volume of invoices was another concern, as late payment could result in extra fees.

Result: Reduced Risk. Streamlined Processing

Many automated features to reduce RIM-related risk were incorporated. A high-level summary of those features provides insight into the solution's design:

- converted it to an XML file.
- VPN access to the web-enabled system allowed secure, roundthe-clock processing; remote staff could work flexible schedules in response to the organization's
- An audit trail was maintained such that metadata remained linked to the appropriate document and included an access log. With that log, it would be possible to know when and by whom

VPN access to the web-enabled system allowed secure, round-the-clock processing; remote staff could work flexible schedules...

- Time was saved and entry errors were minimized because data was scanned (digitized) instead of typed into the ERP.
- Invoices were scanned to PDF and archived at initial receipt, eliminating the need to physically circulate them to internal departments. All paper copies were retained in a single, secure location within the organization.
- To guard against duplication, invoices were validated upon being archived to ensure there was no other document with the same type, name, date, and so on.
- Password-protected access was controlled by employee role or function. Some individuals could view only, while others could view and modify, for instance.
- Authorized individuals could use a digital signature to approve invoice payment. Captured metadata included the approver's name, date, and time, effecting non-repudiation of the approval action.
- To incorporate the data into the ERP system efficiently, the automated tool read the PDF and

- a document was worked at each stage of the processing procedure.
- Relevant staff were automatically alerted by e-mail when documents were in queue. Special notifications were issued when due dates approached, allowing continual monitoring of on-time processing goals.
- Management was able to gather and analyze metrics and to calculate the total time to process (from invoice receipt to payment issuance). As a result, management could more easily measure performance goals on a monthly, quarterly, or annual basis.

Summary

The case study suggests that systems automation can offer a technologically sound opportunity to control RIM-related risk. It can foster efficiency throughout the organization, decrease reliance on physical media, and help conserve limited natural resources. **END**

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