Automating Controls

By Mukul Pareek, CA

As organizations stabilize their Sarbanes-Oxley efforts from frantic projects to stable, repeatable processes, teams responsible for compliance are facing significant pressure to rationalize and reduce the costs of instituting and running controls.

Controls are not only expensive to put in place and operate, but also create further downstream costs, such as increased audit hours and a decline in process throughputs. For example:

- Controls slow down the execution of business processes as every control embedded in a process needs to be executed and documented in an auditable data trail.
- Operational costs go up to assure the segregation of duties, multistage reviews and approvals, and various forms and checklists required to operate controls.
- There is a significant cost to laying down the infrastructures to produce evidence at a later date to demonstrate that a control operated in the past as intended.
- Increased external audit efforts lead to audit fee increases, without even counting the cost of new internal and external resources that support the auditors in arriving at their opinion.

At the same time, regulation makes internal controls mandatory and their cost a part of the cost of doing business.

Benefits of Automating Controls

The challenge for management, therefore, shifts to managing the control environment in an optimum manner from a cost and regulatory perspective. Most organizations have a significant opportunity to leverage their investment in technology to operate and monitor controls more efficiently by automating their controls.

Controls automation involves leveraging technology to build and enforce internal controls with the least manual intervention possible. It can take many forms, including better use of available system configuration options of the kind common in enterprise resource planning (ERP) systems, to using workflow and imaging technologies to automate and drive processes from start to completion. Controls automated in this way offer significant and immediate benefits, including the following:

- All approvals—in fact, every process step—can be designed to create an immediately available electronic audit trail that can be searched, analyzed and costlessly duplicated.
- Approval and authorization limits can be enforced in real time, as opposed to after-the-event reviews.
- Business rules that reflect management's control procedures can be implemented with an assurance of 100 percent compliance, because if the system does not allow a transaction, it simply cannot be executed.
- Audit costs can be brought down as exception reports (for example, where the workflow was expedited or a certain kind of transaction occurred) are automated. Sampling of the population for errors is rendered irrelevant as all exceptions are always known. Tests of one can replace large sample testing, as controls are automated.
- Monitoring of control exceptions becomes real-time, as opposed to waiting for the auditor to discover them.

Figure 1—Control Types and Automation Approaches

Control Type	Examples of Controls	Example Approaches to Automation
Reconciliation/ reperformance	Reconciliations to the general ledger (GL), manual bank reconciliations, reperformance of calculations	Automated reconciliation reports based upon common reference fields
Analytical reviews	Variance analyses, comparisons with expectations and past periods	Automated variance reports, combined with exception-driven notifications for variances that exceed predefined tolerance
Verifications	Physical verification of inventory and equipment	Blind counts can be automated by loading physically observed quantities into the system and have discrepancies identified by the system
Approvals	Approval of timecards, contracts, disbursements, credit memos	Automated notifications using workflow and imaging using predetermined approval matrices
Segregation of duties	Different individuals charged with initiating, approving and recording transactions and custody of assets	Using application functionality to restrict access and segregate duties
Confirmations	Customer and vendor statements mailed	Vendor and customer self-service using a web front end
Checklists	Generally Accepted Accounting Principles (GAAP) or other reporting checklists	Automated workflow-driven checklists that highlight and notify exceptions
Oversight	Senior management review of results, board of directors review of financial information	Automated reporting

Candidates for Controls Automation

All manual controls are strong candidates for automation, and quick wins can often be achieved even if a control is partially automated. Manual controls generally take the forms described in **figure 1** and can be automated to varying degrees in a variety of ways.

Each of the control types in figure 1 is a candidate for automation; some examples in **figures 2** through **4** illustrate the concepts discussed earlier in this article.

Examples of Controls Automation

In addition to the previous examples, many other processes lend themselves to control automation using superior design and better use of technology, such as:

- Subledger reconciliations
- Revenue reconciliation and controls (e.g., ensuring that every shipment is billed and invoiced amounts are reconciled to revenue recognized)
- Book to physical verification adjustments automation
- Other manual processes

Conclusion

As organizations rethink their Sarbanes-Oxley compliance efforts with a view to making them sustainable and value-creating, an opportunity exists to combine technology and business process expertise to simultaneously drive down costs and improve risk management efforts. Technology risk managers, with their knowledge of systems and technology, can make this possible. Controls automation projects often bring immediate returns, and even though they are best taken up at the highest organizational levels, significant savings can

Figure 2—Automating Approval Limits

Before Automation	After Automation	Potential Benefits
♦ The board of directors decides approval limits for chief financial officer (CFO), chief operating officer (COO), etc., in respect to capital expenditure and expenses. ♦ Approval limits are further delegated down to departmental and unit managers by executive memos, e-mails, etc. ♦ Approval limits are generally managed by human resources—extensive paper trails, updates and revisions maintained and communicated manually. ♦ There is no central repository for verifying approval limits. ♦ There is no means of ensuring adherence to management's authorizations. ♦ There is no easy means of verifying physical signatures. ♦ There is no standard means of communicating approvals; it can be done through e-mails or signed paper documents and, in worst cases, actions can be taken based upon verbal approvals.	♦ There is a precise definition of business process, with all types and levels of approval routes clearly defined (e.g., by cost center, expense code, business unit). ♦ There is a central repository of approval authorizations created as part of the organization's ERP application. ♦ Authorization limits are maintained by a single data management group. ♦ Documents are routed for managerial approval electronically (through e-mail or on a web-based inbox). ♦ Actual approvals are made electronically by signing on and clicking an "Approved' button. (It is also possible to reject or refer to someone else—all accomplished electronically.)	♦ Authorization limits are kept current, and no organizational energy is wasted in communicating or discovering new approval limits when they change. ♦ There is transparency of approval authorizations across the organization, and approval limits are available for review per management's specific directions. ♦ A complete electronic audit trail exists of all approvals maintained within the system. ♦ There is ease of audit as computer assisted audit techniques (CAATs) can be applied to electronic approval data. ♦ Automation enables the move to "prevent" as opposed to "detect" issues.

Figure 3—Automating Intercompany Reconciliations

Before Automation	After Automation	Potential Benefits
♦ Information is manually passed between accountants for intercompany charges (using e-mails, faxes, intercompany mail, etc.). ♦ Charges get lost, there are errors in communication, and timing issues create reconciling items. ♦ Reconciling items represent items not recognized on the income statement/ balance sheet until resolved. ♦ Identification of reconciling items consumes effort, and resolution takes additional time. ♦ There is a well-developed, high-cost cottage industry in most companies.	♦ The redesigned process requires all accountants to enter all intercompany charges in a centralized intercompany system. ♦ It is possible to pick up intercompany charges from the originating company's books and automatically transmit them to the receiving entity. ♦ A centralized intercompany system holds the charge until it is approved (using automated notifications and approvals) by the counterparty. ♦ Required ledgers automatically populate upon approval. ♦ Reconciling items are flagged immediately in a central database.	♦ Controls are embedded in the process itself, as opposed to having to be subsequently performed. ♦ Intercompany accounts stay balanced, as no postings are made unless approved by the counterparty. ♦ There are reduced transaction entries, as only the initiating entity needs to enter data. ♦ Unapproved items are visible and transparent, allowing process bottlenecks to be identified and removed over time.

still be made in the short term at the departmental or functional levels where sponsorship may be easier to obtain, especially in the initial stages of the project. Quick initial wins can often be scored by leveraging the existing Sarbanes-Oxley process documentation and looking for manual interactions, approvals and reconciliations inherent in the financial reporting process. However, controls automation efforts do not need to be focused solely on Sarbanes-Oxley; they can be extended to nearly every aspect of the business where controls need to operate, regardless of whether these controls are relevant to the accuracy of financial reporting. Cross-functional buy-in for controls automation projects can help increase the chances of the project's success, and internal and external auditors, internal IT groups, compliance and finance would be important stakeholders from whom to obtain representation and sponsorship. COBIT, with its emphasis on value creation, can be a useful resource to articulate the connection between value and the controls being automated—and demonstrate to senior management the business benefit from a controls automation project. While COBIT is more focused on IT processes, its framework is equally applicable to governance improvement projects such as these.

It is important to remember that while cost savings are an important outcome from automating controls, the longer-term benefit is obtained from improved risk management that comes from transparency of processes, visibility of exceptions, access to past events that are logged electronically and ease of implementation of management's governance directions.

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