



## White Paper Series

# Ingenuus Solutions for Compliance: Sarbanes-Oxley

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Introduction .....	4
Background .....	4
Sarbanes-Oxley and IT .....	4
The Compliance Strain On IT .....	4
More About Sarbanes-Oxley .....	5
Section 404 .....	5
Sarbanes-Oxley's Impact on IT .....	6
Compliance Issues for IT.....	7
Improving Financial Reporting .....	7
Protecting Against Fraud and Tampering .....	7
Establishing and Automating Business Processes .....	7
Attesting to the Effectiveness of Internal Controls.....	7
The Cost of Compliance .....	8
IT Investments that Support Sarbanes-Oxley .....	8
Security and Audits .....	8
Document and Record Management .....	9
Reporting.....	9
Business Process Management.....	9
Ingenuus Support for Sarbanes-Oxley.....	9
Security and Audits .....	9
Document and Record Management .....	10
Reporting.....	10
Business Process Management.....	10
Summary .....	11
Revision History.....	12
Revision History.....	12

## **Introduction**

The latest push for compliance comes from Sarbanes-Oxley. While Sarbanes-Oxley is primarily financial legislation, it impacts much broader operational and IT issues for companies.

This white paper outlines the IT issues behind Sarbanes-Oxley, examines the steps IT executives can take to comply with the law, and highlights technologies that can be deployed to minimize the cost of compliance.

## **Background**

On July 30, 2002 the business world changed. The change occurred when the Public Company Accounting Reform and Investor Protection Act of 2002—more commonly known as Sarbanes-Oxley—was made into law. The legislation was born out of investor outrage over the financial scandals of Enron, WorldCom, HealthSouth and others and was designed to ensure that businesses have adequate internal controls in place and that the information published in their financial statements is accurate. Senior executives, in turn, were encouraged to comply with the new law under pain of multi-million dollar fines and lengthy stays behind bars.

## **Sarbanes-Oxley and IT**

IT departments have taken the biggest hit in terms of effort to insure compliance. While Sarbanes-Oxley is primarily financial legislation, it impacts much broader operational and IT issues for companies. At the center of this impact is Section 404 of the law, which requires companies to establish and maintain an adequate internal control structure and financial reporting procedures as well as regularly assess and attest to their effectiveness. As IT organizations maintain the infrastructure businesses need to function on a day-to-day basis, they are playing a critical role in Sarbanes-Oxley compliance. Since IT organizations are also responsible for the business applications (such as ERP) that provide much of the process structure and nearly all of the data required to comply with Section 404, they must develop and implement proper internal controls to ensure the applications they run, the processes they follow, and the data they generate can withstand audit scrutiny. For many, these applications lack adequate audit trails, secure electronic signatures, and flexible process automation tools. The IT Compliance Institute, a Chatsworth, California-based firm that analyzes the technology implications of government regulations, sees the growing importance of IT in compliance efforts in a recent survey. This survey found that 95.7 percent of respondents said Sarbanes-Oxley would directly impact their company's IT departments.

## **The Compliance Strain On IT**

Many businesses are forcibly reallocating their IT budgets to support Sarbanes-Oxley compliance efforts—to the tune of as much as \$1.7 million for the first year and \$1 million every year after that according to The Hackett Group, an Atlanta, Georgia-based business advisory firm. This resource drain, of course, comes at the expense of other much needed IT improvements and investments, improvements that were put on the back burner during the dot com bust and the economic downturn. While IT executives must become more

involved in their company's Sarbanes-Oxley compliance efforts, they must also try to utilize existing software solutions. A key to their success will be how well they propose solutions and guide technology investments that will not only ensure compliance but will also improve operations and process automation while lowering costs.

## **More About Sarbanes-Oxley**

Sarbanes-Oxley, at its core, requires companies to document business processes—called internal controls—and to certify that the controls work. It requires both management and external auditors to report on-and attest to-the accuracy of their financial statements and disclosures. The law also applies to foreign companies listed on U.S. stock exchanges as well as their auditors.

### **Section 404**

It appears that most companies have focused their efforts on complying with Section 404 of Sarbanes-Oxley, which requires companies to issue an annual internal control report. The report details the effectiveness of a company's internal control structure as well as describes the steps it takes to monitor its activities and maintain adequate internal controls. The report must also be signed and certified by both the company's executive management team and external auditors. Unfortunately, Section 404 was initially vague about what was meant by adequate "internal controls." In response, the SEC clarified its meaning of internal controls, defining them as a process that provides reasonable assurance about the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principals (GAAP) and includes policies and procedures that:

Pertain to the maintenance of records, in reasonable detail, that accurately and fairly reflect the transaction and dispositions of the assets;

Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that expenditures are authorized; and

Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the financial statements.

Beyond this definition, the SEC never specified exactly what internal controls were required to comply with Sarbanes-Oxley. The SEC did, however, commend an internal control framework developed by the Committee of Sponsoring Organizations (COSO), an independent group sponsored by five major accounting organizations, including the American Institute of Certified Public Accountants and the Institute of Internal Auditors. Among other items, the COSO framework required companies to ensure the proper authorization of all transactions, implement safeguards to prevent improper use, and properly record and report all transactions.

To date, nearly 20 percent of public companies have adopted the COSO framework as a way to identify and mitigate risk as well as ensure Sarbanes-Oxley compliance. The internal control requirements for compliance were further clarified in a recent report

issued by the Public Company Accounting Oversight Board (PCAOB). The PCAOB was established by Sarbanes-Oxley and tasked with defining the types of processes that must be documented and certified by the law. In March 2004, the PCAOB issued a series of rules that expanded the scope of what was originally thought to be required for Sarbanes-Oxley compliance. The new rules require auditors to identify the locations or business units that are financially significant and evaluate and test their internal controls.

Simply put, companies should not limit themselves to only what goes on at its headquarters when evaluating their internal controls. Companies must also examine controls at key business units, subsidiaries, and locations that could impact their financial reporting. This means that every division, business unit, subsidiary, or even location of a company needs to have a documented set of internal rules that control how data is generated, manipulated, recorded, and reported. With this clarification, companies are increasingly realizing that Sarbanes-Oxley compliance impacts much more than just their finance departments.

Financial legislation is not new, and there have been several attempts to regulate how companies report their finances. Rather than reshaping financial reporting requirements, Sarbanes-Oxley simply raises the bar. The law requires U.S. public companies, private companies with public debt, and accounting firms to improve the quality of financial information they report.

## **Sarbanes-Oxley's Impact on IT**

It's official. Sarbanes-Oxley, while originally thought of as only an issue for finance departments, is becoming the top issue for IT organizations everywhere. The simple logic behind this change in mindset is the essential role that IT organizations play in modern businesses. Sarbanes-Oxley compliance requires companies to establish and maintain proper process and internal controls for those processes. IT organizations—through the applications, infrastructure, and data they manage—are the way to make this happen. Industry experts also support this evolving view of the IT role in Sarbanes-Oxley compliance. A recent survey by AMR Research, a Boston, Massachusetts-based industry analyst group, reported that while half of companies questioned originally viewed Section 404 requirements as involving only financial processes, 79 percent now consider compliance mandates as having to include operations and IT as well as finance processes. However, compliance is just another task for already over-burdened and budget-starved IT organizations.

Given the increasing complexity of IT systems and strategies, IT executives face a daunting challenge. A recent study by the Hackett Group, an Atlanta, Georgia-based business advisory firm, confirms the magnitude of the task facing IT organizations. The study reported that the average \$1 billion company maintained 2.7 different ERP systems and 48 separate financial systems.

## **Compliance Issues for IT**

Beyond managing a multitude of disparate applications and managing a diverse, often global, IT infrastructure, IT executives must concern themselves with several Sarbanes-Oxley related compliance issues, including:

### **Improving Financial Reporting**

One of the primary goals of Sarbanes-Oxley is to increase the accuracy of the financial statements and reports companies file. As most IT organizations are responsible for managing the business applications used to generate these reports—such as the ever-present ERP system—they will play a central role in compliance efforts. This includes defining usage rules and an audit trail for the applications that contribute information to financial reports. Since most companies have multiple ERP systems, IT executives will need to work with finance to establish processes for each system. IT executives will also need to ensure the integrity of the data used by these financial reporting systems as well as their overall security.

### **Protecting Against Fraud and Tampering**

According to the Hackett Group, 47 percent of companies still use stand-alone spreadsheets in some aspect of their financial reporting processes. Unfortunately, this is often the point at which errors and fraud are the likeliest to occur. This reliance on manual intervention in financial reporting will not pass muster during Sarbanes-Oxley compliance audits. IT executives will need to ensure that financial data can be seamlessly—and securely—moved from application to application without manual intervention. IT executives will also need to examine the records retention policies to ensure that financial transactions are properly documented and recorded. This includes managing the multitudes of documents, such as purchase and sales orders, which are part of every financial audit.

### **Establishing and Automating Business Processes**

Sarbanes-Oxley's rigorous internal control requirements will require IT executives to establish documented business processes throughout their company and ensure that they are followed. This is because the enterprise systems used in financial reporting contain most of the process flows and controls followed by companies. IT executives must work with finance and operations to ensure that those departments understand the process flows and controls already available to them via existing software and that a plan is developed to address processes not covered. Business process automation is also a way for IT executives to win points with their CFOs. By using ERP systems or Business Process Management applications to define and automate business processes, IT executives can significantly lower the ongoing costs of Sarbanes-Oxley compliance.

### **Attesting to the Effectiveness of Internal Controls**

While you might not like it, IT executives will have a prominent role in influencing, if not actually certifying the effectiveness of internal controls. Sarbanes-Oxley highlights the fact that companies cannot function properly without the applications, infrastructure, and data IT provides. As Sarbanes-Oxley requires CEOs and CFOs not only to certify that the company's financials are correct but also vouch for the processes used to create

them, IT executives can expect to be increasingly held accountable for the systems and data they manage. In fact, the Stamford, Connecticut-based industry analyst firm Gartner Group predicts that by next year, 70 percent of publicly traded companies will require their CIOs to certify the effectiveness of the internal controls of, and the integrity of financial data generated by IT systems.

### The Cost of Compliance

Sarbanes-Oxley compliance is having another unexpected impact on IT organizations—consuming their resources and draining their budgets. Now, IT executives are finding themselves caught between a rock and a hard place. On one side, their staff is being increasingly called upon to support ongoing Sarbanes-Oxley compliance efforts, overburdening resources, dragging down productivity, and disrupting project plans. On the other side, they are being asked to pick up the tab for compliance—one third of all companies do not have a discrete budget established for Sarbanes-Oxley and expect to fund it from existing departmental budgets. Many companies are also discovering that Sarbanes-Oxley compliance is not cheap. A recent survey of 321 companies by Financial Executives International, a Morristown, New Jersey-based accounting industry group, found that large companies expect to spend an average of \$4.7 million this year on Sarbanes-Oxley compliance. Other industry experts predict the total spending on compliance will reach \$5.5 billion in 2004. IT organizations will bear a sizeable portion of this cost. A recent study by accounting firm PricewaterhouseCoopers found that Sarbanes-Oxley compliance efforts could require an initial IT investment of \$1.7 million. The study also found that compliance could cost IT organizations up to \$1 million each year in ongoing costs.<sup>1</sup>

### IT Investments that Support Sarbanes-Oxley

Faced with rising departmental costs and increasing professional exposure due to Sarbanes-Oxley, IT executives must examine how technology can be used to ensure compliance and also cut costs and minimize resource demands. No matter what technology vendors might say, there is no "silver bullet" for Sarbanes-Oxley. There are, however, prudent investments IT executives can make not only to achieve compliance but also to improve IT systems. These investments can also help to reduce ongoing compliance costs. There are several supporting technologies that can be deployed to support Sarbanes-Oxley compliance activities and that supplement existing ERP investments.

### Security and Audits

IT executives must invest in tools that improve the overall security and audit control of their systems. Sarbanes-Oxley compliance requires a holistic look at IT governance and audit control including the security of a company's financial reporting environment, data integrity, systems management and control, and fraud detection and prevention.

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<sup>1</sup> IT Costs for Sarbanes-Oxley Compliance. Source: PricewaterhouseCoopers LLP RFG

## Document and Record Management

Documents and records are essential elements of compliance. Sarbanes-Oxley requires that approved business processes are established and communicated. Document management technologies can be used to ensure business processes are properly recorded and available. Sarbanes-Oxley also requires that documents integral to the preparation of financial reports are easily available for auditing purposes. Document management can be a valuable tool to ensure that critical records, such as purchase order and invoices, are readily available.

## Reporting

IT executives must also invest in reporting tools that provide management and process owners with real-time visibility into operations and ensure alignment though all levels of their organization. These tools are also required to support other requirements of Sarbanes-Oxley such as the rapid assessment of material events and their financial effect as defined in Section 409 of the law. Reporting tools also help satisfy the need to disclose critical information quickly and accurately to the right individuals, both internal and external.

## Business Process Management

As the core of Sarbanes-Oxley revolves around defining business processes and ensuring that they are followed, Business Process Management is another supplemental technology that IT executives should consider deploying. Business Process Management can be used to design, test, automate, and monitor the execution of key business processes to ensure standardization and enforcement. This will allow IT executives to cover compliance while reducing ongoing costs.

## **Ingenuus Support for Sarbanes-Oxley**

Ingenuus Software's Compliance Solution can provide IT executives with the practical solutions they need to reduce their Sarbanes-Oxley compliance burden at a very low cost, while leveraging existing solutions.

## **Security and Audits**

Sarbanes-Oxley requires IT executives to ensure the overall security of the IT systems, including which users have access and a clear delineation of roles and responsibilities. Ingenuus can help with compliance by enabling system administrators to grant or restrict end-user access to Ingenuus functionality in a process based manner rather than a static manner. This capability enables administrators to define personal, group or role-based security profiles, such as "AP Processor," as well as determine all of the access privileges and rights for that role based on each process. This allows administrators to increase overall system security while ensuring the separation of roles required by Sarbanes-Oxley.

Ingenuus Smart Expediter provides an audit trail that can be used when IT executives need to attest to the end-user access to their Ingenuus system. Ingenuus logs the full

history of changes and any other activity to key business data elements within Ingenuus, thus providing comprehensive audit trail for data required for Sarbanes-Oxley.

## **Document and Record Management**

Sarbanes-Oxley also requires companies to improve their document management capabilities to ensure that established business processes are followed and to support the increased audit requirements for financial reports. Several document management solutions offered today do not adequately address document processes but rather focuses on repository security and document status. Ingenuus supports both Sarbanes-Oxley requirements for a document management system ensuring the proper documentation, communication, and execution of approved business processes and supporting the preparation of financial reports by linking documents to specific process tasks. Ingenuus enables users to create, manage, and publish critical documents and records easily, and it ensures the delivery of the information to the right person, in the right format, regardless of the originating system or application. The system's secure document repository and process packet approach to data enable users to find the documents and supporting information they need quickly and simply as part of the process eliminating the need for users to search a huge repository for the correct information. Documents can be delivered in a wide variety of ways, including any network-enabled printer or fax machine, email application, via the web, wireless devices, or PDAs.

Scanners are an often-overlooked component of document management systems, especially for Sarbanes-Oxley compliance. Scanners are required to get critical business documents and other records into an electronic format where they can be better managed and accessed. Ingenuus is compatible with virtually any scanning system.

## **Reporting**

The increased reporting requirements of Sarbanes-Oxley can be addressed simply with Ingenuus. End users can easily create custom reports as easy as building a query. These reports provide managers and business process owners with real-time critical information, improving communication. System administrators can also create global reports that can be used by all users. Reports are easy to create, save, and are web based.

Time based alerts are part of the process and alert users, administrators, and managers to potential or actual delays. The Ingenuus Inbox lists tasks in order of priority so that each user knows what they need to do and what is most important.

## **Business Process Management**

One of the most critical items for Sarbanes-Oxley compliance, and the one least likely to be addressed by most solutions, is the definition and creation of established process flows and the automation of those flows. Ingenuus provides a comprehensive Business Process Automation solution that enables companies to design, test, automate, and monitor the execution of key business processes as part of Sarbanes-Oxley compliance. Ingenuus Smart Expediter is a full-featured, web based comprehensive Business Process Management (BPM) solution that provides companies with the ability to create, control, change and measure processes with ease. The application's graphical design tools make

creating and editing process easy. The Ingenuus Smart Expediter combines process automation, document management and integration middleware allowing for straightforward integration into existing environments. Ingenuus enables companies to streamline and automate repetitive tasks, which reduces error rates and ensures that approved business processes are always followed. Processes themselves are under revision control. The application also provides users with the tools to manage and monitor the performance of critical processes in real-time and alerts them to significant events. The module supports the definition of both group-based and individual-based roles and responsibilities, which provides businesses with the flexibility they need to support customized and complex business processes.

## **Summary**

The bottom line is that IT executives must become more involved in their company's SOX compliance efforts. They must begin to propose solutions and guide technology investments that will not only ensure compliance but will also improve operations and lower costs.

Ingenuus provides a 'light-weight' solution for compliance. Ingenuus is 'light-weight' when it comes to price and implementation time, however, it is not 'light-weight' when it comes to mapping and managing processes.

It is being said that Sarbanes-Oxley adds about \$1m in costs to a company. Using Ingenuus software, you can automate and streamline your existing processes to reduce the costs of being compliant with Sarbanes-Oxley and gain efficiencies in many other areas as well.

## Revision History

Date	Version	Author	Comment
June 14 <sup>th</sup> , 2001	0.5	Vivek Prasad	Draft for initial review
August 14 <sup>th</sup> , 2003	1.0	Vivek Prasad	Released
November 29 <sup>th</sup> , 2004	2.0	Christopher Williams	General edits to bring dates and reference to date, including logo.