Top Ten Emerging IT Audit Issues

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Overview

• IT controls continue to increase in importance to organizations
  – Corporate reliance on technology increases
  – Compliance requirements increase

• Deficiencies in IT controls can have a significant impact on the organization
IT Audits

Where We Need To Be

Where We Have Been

Risk

Value

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Top 10 IT audit issues

• By no means a comprehensive list
• Will vary by environment
  – May be greater/lesser risk depending on industry, technology, business processes etc.
• This list is based on what we see in the marketplace
• Designed to get you thinking about your environments and if currently scheduled IT audit procedures will evaluate these risks
• List is in no particular order
1. Omnichannel Commerce

**Issue**

Traditional “bricks and mortar” channels are merging with e-commerce channels to create a single integrated approach to sales.

**Risk**

- Failure to evolve could impact long term enterprise viability
- Will change sales approach and systems
- Large integration and master data concerns

**Recommendation**

Understand current and planned changes to sales channels. Determine impact on systems, specific transactions processed, accounts impacted, and master data. Evaluate risk and then plan and execute audit procedures accordingly.
2. Cyber Security Reporting

**Issue**
As of October 2011, the SEC now requires public companies to disclose the risk of cyber incidents as part of Management’s Discussion and Analysis if "these issues are among the most significant factors that make an investment in the company speculative or risky."

**Risk**
- Failure to comply with SEC reporting requirements
- Exposure to potential shareholder litigation if requirement not met
- Audit Committee exposure

**Recommendation**
Challenge is that the reporting requirement lacks specificity. Organizations must determine what to report, if anything. Therefore, organizations must have a process for identifying exposures, evaluating impact, and then reporting and disclosing appropriately. IT audit should perform an assessment of this process to determine if it exists, and how comprehensive it is. Additional steps should be taken to evaluate how effective the process is.
3. Software Asset Management

Issue
Software licensing contracts are complicated, and software lifecycles are complex. Economic downturn has caused software vendors to aggressively pursue licensing audits.

Risk
- Potential significant financial liabilities in case of an audit
- Loss of potential savings
- Failure to “sunset” unused applications

Recommendation
Perform a software asset management (SAM) audit. Consider use of International Organization for Standardization (ISO) and Information Technology Information Library (ITIL) SAM standards. Audit should include evaluating the process for SAM, review of contracts and software license baselines, and analysis of non-essential software and patch deployment.
4. Payment Processing

Issue
Emerging methods of payment processing (ISIS, GoogleWallet, PayPal).

Risk
• Failure to adopt impacts potential revenue
• Impact on revenue cycle processes, systems and controls

Recommendation
Determine what changes are planned or underway to adopting new payment processing technologies. Determine impact on financial systems and processes (e.g. sales audit). Evaluate integration management. Identify new security and controls considerations and execute audit steps accordingly.
5. Hyper-Hybrid Cloud

Issue
Adoption of heterogeneous cloud solutions creates significant issues with management and integration of processes and data, as well as leads to the need for deployment of additional management solutions.

Risk
- Master data proliferation and management
- Disparate cloud solutions impact business processes
- Security management becomes much more complex e.g. Security Assertion Markup Language (SAML), OpenID
- Need for effective service lifecycle management increases

Recommendation
Understand current and planned cloud services grid, and specific business control points, integration and workflow. Understand security management strategy, and deployment of new technologies/standards. Determine process and data risk and identify/test controls. Evaluate Service Organization Control (SOC) reports for vendors.
6. Data Lifecycle Management (DLM)

Issue
2011 saw the emergence of new regulations and legislation for records management and data retention. Regulators have significantly increased their scrutiny of the data lifecycle space.

Risk
• Large potential financial penalties for non-compliance
• Impact on brand
• Impact on customers and vendors

Recommendation
Gain an understanding of how DLM is operationalized throughout the organization, DLM awareness levels and how DLM compliance is achieved. Evaluate the organization’s DLM capability maturity and identify compliance gaps related to the DLM governance structure, policies, processes and procedures.
7. End User Computing (EUC)

**Issue**
Significant increase in evaluation of spreadsheets and other end user computing solutions by auditors and regulators. Additional regulations promulgated (e.g. Solvency II). Uncontrolled EUCs still impacting financial statements and business operations.

**Risk**
- Loss of critical data
- Potentially inaccurate financial or management reporting
- Exposure to regulatory sanctions or fines

**Recommendation**
Perform an extensive EUC audit. Evaluate criteria such as criticality determination, governance model, and use of technical accelerators. Audits should also evaluate programming structure. A policy-based audit and/or access based audit is likely insufficient.
8. IT Governance

Issue
IT Governance continues to play a large role in aligning the proliferation and use of technology with organizational objectives. Also, Institute of Internal Auditors (IIA) Standard 2210.A2 states: “The internal audit activity must assess whether the information technology governance of the organization sustains and supports the organization’s strategies and objectives.

Risk
• Noncompliance with IIA standards
• Potential misalignment of IT resources with organization strategy

Recommendation
Assess capabilities across IT governance capabilities: Strategic Alignment, Risk Management, Value Delivery, Performance Management and Resource Management. Establish a baseline of understanding regarding current capabilities and maturity level of IT governance processes.
9. Digital Identity

Issue
Deployment of emerging technologies and unification of internal/external systems creates significant identity sprawl, and difficulties managing across platforms, applications and networks. To be efficient and compliant, federated identities are emerging. Our IT access audits and analysis are becoming more reliant on review-based controls.

Risk
• Unauthorized access to data or transactions
• Regulatory fines or litigation
• Brand impact

Recommendation
Understand corporate security perspective on identity management. Inventory systems, devices and technologies currently deployed or planned (consider external sources as well). Evaluate strategy and technical solutions for managing digital identity. Perform a detailed audit of critical technologies and controls.
10. Product Duplication

Issue
Proliferation of cheap 3D printing technology makes it possible to easily duplicate certain consumer products.

Risk
• Loss of sales, market share
• Impact on brand

Recommendation
Understand current product mix; identify products susceptible to duplication (small, higher value items are typical). Understand security and controls around schematics. Peruse pirate sites to identify proliferation of schematics. Consult with loss prevention teams to understand approach to managing remote duplication.
Summary

• Need to understand which items may be relevant in your business and technical environment
• Ensure that risk assessment and audit universe address relevant items
• Don’t walk the plank alone – communicate with management and the audit committee
• Plan resource requirements
  – Be careful not to underestimate
Questions
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