Lessons Learned from Integrated Management Systems

By Sandford Liebesman

Introduction

The Sarbanes-Oxley Act (SOX) was published in 2002 in response to scandals such as Enron, WorldCom and other misuse of corporate resources. In 2003, Paul Palmes and I formed the SOX Team to investigate the integration of quality and environmental managements systems (QMSs and EMSs) with financial management systems. Since then, we have presented six workshops, a webinar, two ASQ conferences and a case study conference call. Interest has picked up in the quality community, and we made contact with personnel in the Institute of Management Accountants, the Institute of Internal Auditors and the American Institute of Certified Public Accountants.

In September 2005, *Quality Progress* published my standards column[i] describing the relationship between ISO 9001 and ISO 14001 and the SOX basic internal control tool, the COSO guidance document.[ii] COSO is used to satisfy the key requirement in section 404 of SOX that the organization have an effective system of internal control. In March 2006, Quality Progress published my standards column[iii] describing feedback from 8 case studies conducted by the SOX Team.

Case Study Questionnaire

It was clear to the SOX Team that QMSs and EMSs can provide help to satisfy more than just section 404. To obtain information on this support, the team developed a questionnaire that was completed by eight case study organizations.

- Otter Tail Corp., an energy and healthcare provider and manufacturing conglomerate.
- Nordham Group, an aerospace supplier.
- Intrado Inc., a provider of 911 services.
- StonCor, a leading corrosion protection company.
- Communication Test Design Inc., a leading telecommunication equipment repair company.
- International Gaming Technology, a supplier of services and equipment to casinos.
- Linear Technologies, a manufacturer of high performance analog integrated circuits.
- NVE Corp., a manufacturer of magnetic integrated circuits.

The questionnaire consisted of five key areas in which these organizations' QMSs can support the financial management system and in particular the internal financial auditors (IFAs) in compliance to SOX. The results are summarized in Table 1.

Supporting Financial Operations and Controls.

The participants identified value adding improvements and reduction in the cost of operations. They also identified non-value added activities and costs that were eliminated by the organizations. It supported financial processes such as bids, settlements, mergers and acquisitions and revenue recognition. Processes familiar to QMS and EMS managers, such as

shipping, receiving, nonconforming product, inventory control and customer focus were sources of valuable inputs to SOX compliance.

Training the IFAs to Use Quality Tools.

The quality and HR organizations provided training to financial personnel in process structure, mapping business processes to the system of internal controls and measuring and auditing these processes. Part of the training effort consisted of identifying the steps in the product or service realization process. This helped expand the financial personnel's view of the organizations' operations.

Supporting the Risk Management Process.

Quality personnel helped plan the risk management process. This included early identification of risks and identification of operational nonconformities and their corrections. The QMS was a source of early identification of risks and corrective and preventive actions that help the bottom line. Regular internal audits provided valuable information in early risk identification. The management review was extended to include risk management.

Supporting the Auditing Process.

Quality management led a focus on process audits and the use of risk management indicators. Key elements of the auditing process are identification of nonconformities, determining root causes, corrective actions (CA) and documentation of CA verifications. The audit results supported testing of internal controls and validation of product and process performance measures. Results strengthened alignment of marketing and sales. Some organizations consolidated the audit reports sent to their boards of directors.

Developing Business Process Measures.

A key requirement of ISO 9001, measurable objectives, was instituted and used in process and product (or service) improvement. Objectives are an important part of the ISO 9001 improvement process, which also includes the quality policy, audit results, analysis of data, corrective and preventive action and management review. An effective improvement process can provide evidence of what the financial auditors call "tone at the top."

Lessons Learned Year One

Creation and testing of the financial processes was part of an improvement process. By eliminating redundant items in the financial and quality processes, significant time was freed up, allowing more time for performing value adding activities. This resulted in streamlining financial reporting and review activities.

One organization spent a lot of time analyzing the shipping process. Data from shipping was a direct input into accounts receivables and revenue recognition. Another organization confirmed that outputs from the customer service and order processes are adequate and effective for the needs of the finance department.

There were a number of inputs related to risk management. Risk management is driven through the product realization process and is product focused. Contract review is important because it focuses on financial risk. Nonconformance issues are documented and placed in the Corrective Action system. This is an aid to early identification of risk.

Every step in the product realization process creates a transaction. The advice from one participant was to make sure to identify critical points in each process. This will result in the creation of additional controls.

Some advice on auditing came from one organization that formerly had audited each division's financial controls separately. In the past the same errors were made in each division. Now the organization audits by process, following the processes from division to division. Other suggestions on auditing were to cross train quality and financial auditors. IFAs learned operational controls, which resulted in opportunities to improve the bottom line. They also met a major goal: ISO 9001 and SOX tests of controls in one audit.

A final piece of advice was to get a fixed price from the external financial auditor. This will result in the auditor's not expanding the audit, reducing the time spent by the auditee organization and limiting the cost of the audit.

Lessons Learned Year Two: Integrating the Audit Teams

First of all, the organizations avoided duplication of effort during the audits. They focused on eliminating duplicate tests and integrated ISO and SOX checklists. They also improved communication by holding combined kickoff and debriefing meetings and distributed audit findings, corrective actions and preventive actions.

The organizations had to work with two teams of auditors, the external financial SOX auditors and the ISO registrar auditors. They created an integrated audit findings data base and scheduled both combined audit segments and separate segments. One organization developed an ISO/SOX overlap matrix showing the ISO and COSO requirements side-by-side.

For the SOX portion of the audits they educated their personnel on the criteria in the audit document used by SOX auditors, PCAOB Audit Standard # 2. They cross trained on ISO and SOX criteria, IT and financial controls, fraud protection and risk management. Most importantly they worked with process owners to determine the key controls and determined techniques to sample the others. One organization developed a tool, the Integrated Audit Program Chart which viewed for each control its objectives, the identification of the control owner, the test (s) used, and the results including deficiencies and corrective actions.

Year two results showed improvement in cost of compliance for the case studies with one organization reduced the cost by 60%. The key to this large reduction was obtaining a fixed price from the external auditor. The organizations are now into year three and will be asked to report on their further improvements.

A Final Word

Integrating quality and financial management systems and their associated audits is an opportunity for quality professionals to provide value directly to top management and their organizations' board of directors. Also it is an opportunity for quality and financial professionals to learn about the other's activities and language. Finally it is an opportunity for an organization to reduce the high cost of complying with SOX 404. These are opportunities that should not be missed.

Table 1.
Results of SOX Case Study Questionnaire

**	
	• **Business Process Operations**
	o Financial operations & controls
3	▪ Identified non-value added activities and costs in the Product/Service Realization Process
6	▪ Identified value-added improvements and reduced cost in operations.
3	▪ Used the Improvement Process to reduce costs and improve product/service quality
2	▪ Used the Supplier Management Process to reduce supply costs and improve product/service quality
1	▪ Used the Shipping Process to reduce transportation costs and improve product/service quality (Please include products or services shipped electronically).
2	▪ Used the Customer Focus Process to improve customer satisfaction
5	o Supported other financial process (e.g. RFQ, Bids, Settlements, M&A, Revenue Recognition)
	• **Used the Training Processes to train IFAs in the following:**
5	o Business Process attributes
6	o Mapping Business Processes to COSO
6	o Measuring and auditing Internal Controls
6	o Process Auditing
	• **Supported the Risk Management Process**
7	o Planning
5	o Early identification of Risks
6	o Non-Conformances
5	▪ Non-Conformances managed at various management levels depending on risk levels
5	o Preventive Action
7	o Corrective Action
5	o Management Review
	• **Supported the Auditing Process**
3	o Audit planning
7	▪ Used Process Audits, not compliance audits
5	▪ Used Risk Management indicators
3	o Audit Results
6	▪ Supported Testing of Internal Controls
4	▪ Supported Validation of Process and Product performance measures
2	• Confirmation of Operational expenses
4	• Operations alignment with marketing & sales
4	• Traceability of customer requirements from contract review to customer delivery
4	▪ Reporting of material non-financial information
4	o Collaborated with financial auditors on consolidated audit reports to the Board of Directors' audit committee
	• **Developed the following Business Process Measures:**
4	o Documented results of Management Review meetings
5	o Customer Satisfaction Measures
5	o Measurable objectives used in product/service improvement
1	o Balanced Score Card (Please indicate measures used in the scorecard)
4	o Supported the IT organization in development of Software Quality measures
4	o Supported IT Development of improved (expanded) controls within the company

** The number of respondents that agreed with the statement.

i Sandford Liebesman, "Mitigate Sox Risk With ISO 9001 and 14001, *Quality Progress*, September 2005, 91-93

[ii] " Internal Control—Integrated Framework, Evaluation Tools," Committee of Sponsoring Organizations of the Treadway Commission, September 1993.

[iii] Sandford Liebesman, "QMSs and EMSs Support Financial Management Systems," Standards Outlook, Quality Progress, March 2006, 83-85

About The Author

Sandford Liebesman, Ph.D., is a senior professional recognized as a leading expert on international quality standards, ISO 9001 and TL 9000 assessments, business excellence models, risk mitigation based on quality management systems and the Sarbanes-Oxley Act. He is an ASQ Fellow and Chairman of the ASQ Electronics and Communications Division. Dr. Liebesman is also a senior consultant for Change Management Consulting, Inc. He may be reached at sliebesman@cmc-changemanagement.com.