Team-Based Approaches to Compliance with Section 404 of the Sarbanes-Oxley Act

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Abstract

This article reports the results of a research study of how corporations approached compliance with Section 404 of the Sarbanes-Oxley Act (SOX). For this study, high ranking corporate managers were interviewed on the implications of Section 404 pertaining to information systems and compliance approaches. This article explores how the companies initially organized for Section 404 compliance. In particular, this article focuses on team approaches. While anecdotal accounts exist of companies preparing for SOX, this qualitative study provides research-based insights into how firms set up for compliance with this legislation, the kinds of teams and structures that were formed, and the individuals who spearheaded the compliance effort.

Keywords: Sarbanes-Oxley, Section 404, information systems, teams
Introduction and Explanation of SOX Requirements

The passage of the Sarbanes-Oxley Act was the federal government’s reaction to major fraud that occurred at companies such as Enron and WorldCom (Carmichael, 2004). Following the Enron/WorldCom scandals, a fundamental change in the way audits are performed was needed to win back the public’s trust (Tackett, 2004). The change took the form of the Sarbanes-Oxley Act of 2002 (SOX). SOX was designed not only to strengthen internal controls but also to regulate the accounting profession. Kleckner (2004) reported that SOX was passed to ensure that auditors maintain a level of skepticism related to the assertions of management in order to remain independent. As reported by Tacket (2004) “lawmakers believe that the accounting profession has failed to regulate itself in a manner that promotes confidence in the published financial statements” (p. 340).

This research study focuses on the provisions of Section 404 of the Sarbanes-Oxley Act. Of the sixty-six pages of text contained in SOX, Section 404 has caused the most concern (Greifeld, 2006). Section 404 requires management to include in its annual filing with the Securities and Exchange Commission (SEC) a report of its assessment of internal control design and operating effectiveness over financial reporting. This report must include the following:

• An acknowledgment of management’s responsibility for the establishment and maintenance of internal controls over financial reporting.
• The framework used to assess the effectiveness of internal control over financial reporting.
• An explicit statement that internal controls are effective at the end of the most recent fiscal year.
• A statement that the registered public accounting firm that audited the financial statements issued a report that confirms management’s assessment of internal controls.

All material weaknesses that exist in the system of internal controls over financial reporting must be disclosed. If one or more material weaknesses exist, management cannot conclude that the system of internal controls over financial reporting is effective. Since little guidance as to how to implement Section 404 of SOX has been provided, the above requirements have caused confusion within the accounting profession and the corporate community.

Background on Internal Control

In 2004, the Public Company Accounting Oversight Board (PCAOB), a nonprofit group funded by fees paid by publicly traded companies, issued Auditing Standard No. 2, “An Audit of Internal Control Over Financial Reporting Performed in Conjunction with An Audit of Financial Statements.” Sarbanes-Oxley requires management to use a suitable control framework for assessing the effectiveness of internal control over financial reporting. In paragraph 14 of Auditing Standard No. 2, the PCAOB recognizes the framework published by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission, Internal Control – Integrated Framework as a suitable framework for this assessment.
In *Internal Control – Integrated Framework*, COSO defines internal control as “a process, effected by an entity’s board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- Effectiveness and efficiency of operations.
- Reliability of financial reporting.
- Compliance with all applicable laws and regulations.”

In the COSO model, internal controls consist of five integrated components, all of which are necessary to achieve the three internal control objectives: control environment, risk assessment, control activities, information and communication, and monitoring (Committee of Sponsoring Organizations of the Treadway Commission, 2005).

**The Questions**

This paper will provide answers to the following questions. How did companies initially set up for SOX? What kinds of teams and structures were formed? Who spearheaded the compliance effort?

**The Accounting Literature**

Since the Act was recently passed in 2002, there has been limited research published in academic journals about Sarbanes-Oxley. Most of the articles concerning the impact of SOX have been published in practitioner journals such as *The CPA Journal, Journal of Accountancy*, and *Strategic Finance*. The literature addresses some of the unanticipated consequences of Sarbanes-Oxley, including the following: the cost of implementation (Swartz, 2004; Block, 2004), fewer companies going public (Gifford and Howe, 2004), and increased cost of accounting services (Gifford and Howe, 2004). While Sarbanes-Oxley regulations have imposed great stress and cost on organizations, even the critics have recognized the benefits of its implementation including greater board accountability and audit committee responsibility (Lublin and Scannell, 2007).

According to Koehn and Del Vecchio (2004), the passage of the Sarbanes-Oxley Act of 2002 was “the most significant change to the U.S. securities laws since 1934” (p.36) when the second Securities Act was passed. Koehn and Del Vecchio examined and explained several consequences of SOX and reported on the results of the Foley & Lardner survey of 200 senior executives. The scope of their research was very broad. Notable findings of this research included significant increases in auditing fees and a negative impact on corporate mergers. There is little, beyond anecdotal articles to suggest how to initially organize for SOX and Section 404 compliance.

Research also suggests that a team approach and the team’s structure may be fundamental to the success of Section 404 compliance. Lebovits reported that the knowledge of finance and accounting teams can lead the SOX compliance effort by developing ethical role models, modeling ethical decision making, and creating a culture that allows for questioning (2006). Myers argued that a multidisciplinary team is ideal for adopting a code of ethics as required by Sarbanes-Oxley (2003).
Additional Literature

The management literature offers numerous articles about teams and their characteristics. Sundstrom, DeMeuse and Futrell classified work teams as advice, production, project, and action teams. Advice and production teams have a low degree of technical specialization and have low and high degrees of coordination with other work units, respectively. Project and action teams require a high degree of technical specialization and both may have a high degree of coordination with other work units. A project team may be a planning and/or development team while an action team, such as a surgical team, performs and then repeats the performance often under varying conditions (1990).

The use of groups and cross-functional teams can improve quality and/or creative processes and innovation. Cross-functional teams are an effective means for allowing people from diverse areas in an organization to exchange information, develop new ideas, solve problems, and coordinate complex ongoing projects such as SOX compliance. Many teams today perform virtual work; these teams are not co-located and typically employ information technologies (Lipnack and Stamps, 2001). Virtual teams can do all the things that other teams do; they can convene for a few days, a few months or exist permanently to complete project requirements. Virtual teams may suffer from less social action rapport and less direct interaction among members. This situation is compounded if members of the team have never personally met. Unlike face-to-face teams, virtual teams are able to work even if members are located in different parts of the world (Citeman Network, 2007).

Team effectiveness is influenced by multiple factors. A team’s management of its boundaries, i.e., its intra-organizational interactions, affects its performance (Ancona and Caldwell, 1990) and a team’s ability to absorb external data significantly influences its innovativeness (Cohen and Levinthal, 1990). Organizational-capability factors related to staffing are important antecedents to faster innovation (Kessler and Chakrabarti, 1996). Shea and Guzzo identified three significant factors in group performance: task interdependence; outcome interdependence and the belief in a group’s efficacy (1987). But not all collaborative efforts are automatic or equally effective (Jassawalla and Sahittal, 1999) and the nature of task disagreements may diminish team benefits (Lovelace, Shapiro and Weingart, 2001).

Group size affects outcomes and may depend on outcome sought (Thomas and Fink, 1963). There are organizational examples of large teams that are both efficient and effective, but smaller teams are less unwieldy as there are fewer relationships to manage. Larger groups (12 or more) are effective at providing data, but smaller groups can be productive with that input (Robbins, and Coulter, 2007).

Groups cannot be viewed as isolated units but should be seen as complex systems (McGrath, Arrow and Berdahl, 2000). Peter Senge, among others, has argued for a systems approach to organizational learning because the action of one group or team affects other organizational components; system changes must be linked to the strategic goals of the firm. Senge lists five learning disciplines or principles to support a learning organization. These disciplines are personal mastery, mental models, systems thinking, shared vision, and team learning. Team learning goal is to promote skill
development so that the team’s ability is greater than the sum of individuals. Mastering team communication is a subset of team learning. The discipline of team learning is centered on mastering team communication (1990).

The implementation of change in organizations is complex. Kurt Lewin, one of the original contributors to the study of both group dynamics and organizational change, created an awareness of the balance of forces which bring about or resist change (Papanek, 1973-1974). Organization structure may impede or enhance success in the face of environmental complexity. (Lawrence and Lorsch, 1967). Mechanistic organizations may have difficulty managing sudden environmental changes. Kanter has observed that corporations achieve innovation and change via persuasion, collaboration, team building, seeking input, and the willingness to share rewards (1983).

The qualitative study reported below, more closely examines the approaches of compliance teams that have to manage the peremptory mandate of SOX.

**Methodology Overview**

The purpose of this qualitative research study was to ascertain corporate managers’ experiences related to implementing the information systems requirements of Section 404 of the Sarbanes-Oxley Act of 2002. To accomplish this purpose, face-to-face interviews were conducted with a sample of corporate managers, located in the Southwestern Pennsylvania area, who were charged with implementing the requirements of Section 404.

The questions were crafted in language that would elicit information from corporate managers to identify the challenges their organization experienced, the benefits their organization derived, and how their organizations might be affected in the future as a result of implementing the information systems requirements of Section 404 of the Sarbanes-Oxley Act.

The objectives listed above were used as a basis for developing a set of interview questions to gather the qualitative data needed for this study. The responses provided insights into how the companies initially organized for SOX compliance.

The interview questions were pretested on a group which consisted of accounting practitioners, accounting academics, members of a doctoral committee, and an information systems auditor. The group members were selected for their knowledge of the subject matter and expertise in interview question construction. The purpose of the pretest was to validate question content, and ensure the clarity and comprehensiveness of the interview questions. Members of this group were individually asked to review the initial question set and provide input for improvement. Once the review was completed, individual meetings were conducted with each member of this group to discuss the question content and construction. Suggestions from group members were used to clarify, modify, and revise the sample interview questions.

Nine individuals, numbered as participants below, were interviewed but only participants 1 through 8 provided data germane to this article. The participant pool was made up of six men and three women, who held the following job titles: director of internal audit, director of information systems, vice president of corporate audit, manager of internal audit, managing director of internal control analysis, director of internal controls, manager of SOX compliance, and chairman of the board and chief
executive officer. These individuals held positions in corporations categorized as small, medium, and large in size. The criterion used to categorize a corporation as small, medium, or large was average gross revenue reported for the last five years. Companies classified as small reported average gross revenue of less than $700 million over the most recent five-year period. Companies classified as medium reported average gross revenue from $700 million to $1.5 billion over the most recent five-year period. Companies classified as large reported average gross revenue in excess of $1.5 billion over the most recent five-year period. Of the eight companies participating in this study, two were classified as small, one was classified as medium, and five were classified as large. All corporations were publicly traded on United States exchanges.

**Detailed Perspectives of Companies and Participants**

The teams described below manifest aspects of advice, project and action teams in addition to other team characteristics and challenges as described above. Their collaborative requirements of SOX call for boundary spanning interactions to achieve both task and outcome interdependence. As SOX presented these companies with a sudden environmental change, as little guidance was offered by the profession, and as companies had pressing compliance deadlines, their approaches are not surprisingly varied. The firms’ responses to SOX will evolve with their experiences.

**Company 1:**

For the purpose of this study, Company 1 was classified as small. Participant 1 was recruited by a “Big 4” accounting firm on behalf of Company 1 to set up an internal audit department to implement SOX. The position of director of internal audit (DIA) was newly created at Company 1 in response to SOX. Participant 1 was hired as Company 1’s first DIA for the internal audit department. When asked what the role of DIA entails, Participant 1 explained that the job responsibilities of the DIA at Company 1 differ from what would normally be expected from a DIA. According to Participant 1 it was decided by management that the typical functions of an internal audit department, such as operational audits and financial statement audits, would not be performed so that the department could focus solely on SOX compliance. Participant 1 went on to explain that the proposed new internal audit department at Company 1 would be a leadership department bringing in new talent to train and redeploy to other parts of the organization.

Upper level management expected Participant 1 to find improvement opportunities and cost savings on the operational side to help pay for the high cost of SOX implementation. Participant 1 was able to find some improvement opportunities and implement controls but was not able to convince upper management to expand the department as originally planned. Participant 1 reported that the management of Company 1 saw the cost for SOX implementation and said “Do whatever you can to keep it cheap; we need cheap.” This directive caused Participant 1 to reevaluate the position for which he was originally hired and discuss the limitations of the department with the audit committee of the board of directors of Company 1. Participant 1 also explained that after the initial implementation year the position was informally changed from DIA to the SOX compliance manager.
Company 2:
Participant 2 was the director of information systems (DIS) for Company 2, also classified as a small firm. The position of DIS is the top information systems job at Company 2 and all information systems staff personnel from all locations of Company 2 report to the DIS. The DIS, along with the director of internal audit, reports to the chief financial officer at Company 2. The SOX team was responsible for developing a policy and plan for compliance. In addition, an outside consultant was engaged on two separate occasions. The first engagement centered on identifying the systems that were within the scope of SOX and on developing the necessary system controls. The purpose of the second engagement was to test the system controls that Company 2 and the consultant had jointly developed.

Company 3:
Participant 3 was the director of information systems at Company 3, classified as a large company. Participant 3 reports to the audit committee of the board of directors and is responsible for the internal audit department globally. Participant 3 reviews internal controls at all locations and provides an opinion to management and the board as to the effectiveness of internal controls. Participant 3 is also the secretary of the audit committee of the board of directors. The SOX effort at Company 3 is jointly sponsored by Participant 3’s office and the controller’s office. Participant 3 explained that the office of the director of information systems is separate and independent from the company because SOX requires management to assess internal controls annually and provide an opinion of the effectiveness.

Participant 3’s team is supported by members of the internal audit staff. The director provides the oversight for the project, a manager reviews the work papers that are produced, and the SOX auditors perform the testing. The SOX team determines the scope of the SOX review, designs the tests, and oversees the testing. The SOX team at Company 3 schedules audits and deploys personnel to between 40 to 50 corporate locations each year. The SOX team also tests the controls and provides a report on any deficiencies (according to Public Companies Accounting Oversight Board Auditing Standard No. 2 paragraph 9) that are identified. The DIS evaluates whether the deficiencies identified in the report are significant and tracks the remediation. Figure 1 represents the approach taken by Company 3.

Company 3’s disclosure committee reviews all external releases such as 10Ks (annual financial statements filed with the U.S. Securities and Exchange Commission) and press releases before they are released to the public. This review acts as another check at Company 3 to ensure that only accurate financial information is released.
Figure 1. Composition of SOX team at Company 3 listing position responsibilities and reporting lines.

Company 4:
Participant 4 is vice president of corporate audit at Company 4, a large firm. In the role of vice president of corporate audit, Participant 4 helps business units define key controls for each system. Participant 4 is also involved in the decision testing of key controls. Participant 4 reported that Company 4 formed a SOX team that was headed by the assistant controller, who reports to the chief accounting officer, a senior vice president.

Company 5:
Participant 5 is the manager of internal audit (MIA) at Company 5. Participant 5 explained that he is the project manager in charge of the SOX project. Participant 5 is responsible for coordinating the work of the external auditors, reporting to management, and reporting to the audit committee of the board of directors on the SOX compliance efforts. His prior experience with enterprise resource planning gave him a unique understanding of their control system. Participant 5 explained that “SOX came in and changed our world.”

The MIA reported that Company 5 formed a SOX oversight committee and that he reports directly to the CEO on the progress of SOX compliance activities and presents to the CEO any issues that need attention.

Company 6:
Participant 6 is the managing director of internal control analysis at a $4 billion subsidiary and reports to the controller for the subsidiary of Company 6, classified as large. Participant 6 explained that there is a large internal audit function that is independent of all the subsidiaries. The job of the internal audit function is to conduct audits throughout the subsidiaries. Participant 6’s responsibility is to review the day to day processes and to make sure adequate internal controls are in place. Participant 6 is also responsible for identifying weaknesses in internal control and determining how to
remediate the weaknesses. A member of Participant 6’s office is included in all application developments within the organization.

At Company 6, a SOX steering committee was formed and headed by the CFO. The SOX steering committee created the Project Management Office (PMO) at the corporate level. The SOX PMO is under the Director of Financial Reporting. Each subsidiary had to identify a ground SOX champion (GSC) who is the point of contact for the PMO at the subsidiary. Participant 6 is the GSC for a subsidiary. At steering committee meetings, the PMO reports on the status of the SOX effort and a Big 4 accounting firm reports on their efforts, since SOX requires management and external auditors to perform testing independently of each other.

Company 7:
Participant 7 is the director of internal controls for Company 7, also classified as large. Participant 7 developed the plan for implementing Section 404 of SOX at Company 7. Participant 7 is responsible for developing the controls, testing the controls, correcting deficiencies, retesting the controls, and documenting the efforts. As needed, the staff of Participant 7’s office is supplemented by members of the internal audit staff.

An executive SOX steering team was formed at Company 7 in 2004. The team is chaired by the CFO and Participant 7. According to Participant 7, the formation of this team was the single most important element in the SOX process at Company 7, given that it required direct involvement of senior management.

Company 8:
Participant 8 is the manager of SOX compliance at Company 8, a large firm. Participant 8 is responsible for coordinating, monitoring, and reporting the SOX efforts for Company 8. Participant 8 communicates to the divisions what is needed for year end reporting and any changes in the auditing standards or any updates from the Public Companies Accounting Oversight Board that would affect the SOX compliance efforts at the divisional level. Participant 8’s office conducts training on SOX compliance. Participant 8 stated, “Just about anything or any questions they have regarding SOX compliance they come to me.” Participant 8 was also the liaison to the external auditor and receives a copy of all SOX compliance issues identified by the external auditor during the audit.

Company 8 also formed a SOX steering committee. The SOX efforts at Company 8 are jointly sponsored by internal audit and the controllership group. As manager of SOX compliance, Participant 8 reports to the controller of the organization and is provided with a copy of problematic issues that are found during an audit that relate to SOX. Each item is reviewed with either the financial manager or the IT audit manager to help ensure that issues do not escalate to a significant deficiency level.

Company 8 uses an internally developed self-assessment process. After each location goes through its testing, representatives at that location grade the control objectives as good, fair, or poor. If any issues are found during testing, a good rating cannot be assigned. At the end of the fiscal year, all of the objective ratings are reviewed to determine which locations have ratings of fair or poor. A follow-up meeting
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is scheduled to identify what the issues are and whether they can be remedied by the end of the year.

A Summary of Relevant Findings

Table 1 summarizes the composition of the teams that each company assembled and significant team activities and relationships.

Team Composition

This research suggests that a team approach and the team’s structure may be fundamental to the success of Section 404 compliance. In each of these companies, while there may have been an individual that spearheaded the effort, it was the work of the team that was fundamental to the successful implementation of Section 404. Team sizes ranged from four to ten members. Titles of the participants and team leaders varied but they reflected the high responsibilities of compliance.

Reporting Relationships

SOX compliance was viewed as a high level responsibility and priority. Controllers, vice-presidents of domestic and foreign operations, chief information officers, and chief financial officers were involved. Some teams (e.g., 2, 3, and 5) reported to the CEO or board of directors or audit committee of the board. One team (3) included a board director. In at least one company (1), SOX appeared to take priority over other audit responsibilities. These high-level relationships legitimized the process and suggested that there would be accountability.

Coordination of Efforts

Teams (e.g., 3, 5, 7, and 8) were aligned with and assisted by outside consultants and accounting firms, and supported by internal auditors. This occurred across global, corporate, divisional and local SOX efforts. The creation of SOX steering committees (e.g., 7, 8) legitimized the compliance initiatives and connected them to corporate offices.

Links to the Financial Function

Company teams were closely linked to their firms’ financial operations. For example: the DIS of company 2 reported directly to its CFO; team 3 worked with the controller’s office; an assistant controller supervised team 4; and teams 6, 7, and 8 were similarly aligned with the financial function. As Participant 1 stated, cost savings were demanded to offset implementation expenses; the high cost of SOX compliance was tacitly acknowledged through these financial links.
### Table 1
Summary of Team Approaches

<table>
<thead>
<tr>
<th>Co.</th>
<th>Position</th>
<th>Team</th>
<th>Significant Activities &amp; Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Director of Internal Audit SOX Compliance Manager</td>
<td>1 full-time staff person, college interns and some work outsourced</td>
<td>primary focus on cost savings DIA hired externally</td>
</tr>
<tr>
<td>2</td>
<td>Director of Information Systems</td>
<td>4 managers, a member of the internal audit staff (advisory role), an outside consultant to develop system controls</td>
<td>team responsible for developing a policy and plan for compliance, develop system controls DIS reports to the CFO</td>
</tr>
<tr>
<td>3</td>
<td>Director of Information Systems</td>
<td>1 manager and three SOX auditors, supported by internal audit staff</td>
<td>SOX Team schedules audits and deploys personnel to between 40 to 50 corporate locations each year.</td>
</tr>
<tr>
<td>4</td>
<td>Vice President of Corporate Audit</td>
<td>SOX team; assistant controller, the general manager, two managers, and an administrative assistant</td>
<td>VP defines and tests key controls Asst. controller reports to chief accounting officer (senior VP)</td>
</tr>
<tr>
<td>5</td>
<td>Manager of Internal Audit</td>
<td>SOX oversight committee: President of North American and International Divisions; CIO; CFO; controller; President of European segments; General Counsel</td>
<td>Participant 5 reports directly to the CEO on the progress of SOX and is the project manager for SOX</td>
</tr>
<tr>
<td>6</td>
<td>Managing Director of Internal Control Analysis</td>
<td>SOX Steering Committee formed and headed by the CFO: Vice President of Internal Audit; the CIO; all controllers</td>
<td>The SOX steering committee created the Project Management Office (PMO) under the director of financial reporting. Each subsidiary identified a round SOX Champion</td>
</tr>
<tr>
<td>7</td>
<td>Director of Internal Controls</td>
<td>Executive SOX Steering Team chaired by the CFO and Participant 7: Vice president; Controller; Assist. Controller; V.P.of Business Services; Director of audit division; Vice president and CFO of European operations; Dir.of External Reporting; Dir. of External Reporting for European Operations</td>
<td>Responsible for developing the controls, remediation of deficiencies, testing and retesting controls, and documenting the efforts</td>
</tr>
<tr>
<td>8</td>
<td>Manager of SOX Compliance</td>
<td>SOX Steering Committee: Manager of SOX compliance; Controller; V.P. of Audit; Director of Internal Audit; Representative from the Global Business Services Organization; and a field compliance representative from a business unit</td>
<td>Conducted training on SOX compliance; liaison to the external auditor; responsible for administering the internal control self-assessment process; reports to the Controller</td>
</tr>
</tbody>
</table>
Section 404 Requirements

The Sox teams were primarily advice and project teams. The report required by Section 404 includes an acknowledgment of management’s responsibility for the establishment and maintenance of internal controls over financial reporting and a disclosure of material weaknesses in the control process. All teams appeared to be capable of providing opinions on the effectiveness of controls and the nature of deficiencies. Participants 3 and 6 explicitly commented on those responsibilities.

Conclusion

The teams varied somewhat in their approaches and objectives, due apparently to differences in organizational size, the resources available, and the ambiguities of SOX compliance. Participant 5 may have captured the feelings of all the participants when he stated that SOX came in and changed their world. The relatively succinct requirements of the COSO model stated above belie the complexity of planning, creating, testing, and reporting on system controls. Yet the Section 404 compliance efforts of the sampled companies exhibited several commonalities: high-level reporting and coordinating relationships with the teams legitimized the process and suggested a systems approach in several firms; teams were aligned with and assisted by outside consultants and accounting firms, and supported by internal auditors; teams were closely linked to their firms’ financial operations; team sizes were relatively small; titles of the participants and team leaders varied but they reflected the high responsibilities of compliance; and all teams were positioned to comment on Section 404 compliance. Future research could explore how these approaches change over time.
References


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