New technology and a total quality approach can reengineer the PCAOB inspection function.

GUARDING THE AUDITUDE Investors rely on independent auditors to provide assurance that the financial statements of corpora-

ANNUAL CONFERENCE

Opinion

BY MICHAEL ALLES, ALEXANDER KOGAN, MIKLOS VASARHELYI, AND J. DONALD WARREN, JR. tions are reasonably accurate. For the most part, their reliance has been based on the notion that auditors are independent of management and, therefore, represent the stakeholders in public companies. But the accounting and reporting failures in past decades and the more recent accounting scandals involving Enron, WorldCom, and others have brought the credibility and ethical behavior of independent auditors to the forefront. The public, investors, and the U.S. Congress ask, "Where were the auditors when these transactions were occurring?"

Never have the accounting and auditing professions faced a more turbulent time. Restoring their standing requires that auditors buttress their reputations by being subject to the same quality and effectiveness reviews-if not more stringent ones-as other participants in the financial sector. The legal liability and regulatory incentives for auditors to do their job have also proven to be less than adequate. As a consequence, the Sarbanes-Oxley Act of 2002 (SOX) placed the power to inspect the audit industry firmly in the hands of the Public Company Accounting Oversight Board (PCAOB). This new power, however, won't be fully realized unless the PCAOB innovatively applies technology and total quality control (TQC) practices to reengineer its inspection process.

The PCAOB should adopt a methodology similar to total quality management

(TQM) to address the processes that auditing firms have in place to maintain audit quality, thereby minimizing audit failures. In using TQC methodology, the PCAOB would develop inspection procedures that address whether audit planning, execution, and reporting were the most effective in documenting audit issues and the associated audit risks. These procedures would not rely on methods that the private sector has applied in examining the audit work of other firms (i.e., the peer review process in place before the PCAOB was established). TQC is a "fresh start" and would eliminate nonvalue-added processes and/or procedures and their related defects. We'll explain how, but first let's look at what the PCAOB has done so far.

As mandated by SOX, the PCAOB released its first set of inspections in August 2004, which included 16 engagements from each of the Big 4 audit firms (Deloitte & Touche, Ernst & Young, KPMG, and Pricewaterhouse-Coopers). While fault was found with each firm, the errors were relatively minor, either being immaterial departures from generally accepted accounting principles (GAAP) or the failure to perform certain tests. The inspection didn't affect the previously determined audit opinion except in one case. The PCAOB's findings with respect to the Emerging Issues Task Force Issue No. 95-22 (EITF 95-22), "Balance Sheet Classification of Borrowings Outstanding under Revolving Credit Agreements That Include both a Subjective Acceleration Clause and a

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Lock-Box Arrangement," resulted in companies reissuing financial statements to reflect proper application of GAAP.

The PCAOB recently issued the results of its 2005 inspection program of the Big 4. The reports once again included deficiencies in selective audits of each firm and ranged from inadequate testing of internal controls to lack of sufficient competent evidential matter to support audit work in a specific audit area. The inspection teams also found instances in which the firms didn't adequately address GAAP, which, in some cases, resulted in the client being required to restate its financial statements. These 2005 results further highlight the need to develop more timely processes that will assist auditors in identifying potential audit failures.

Given its ambitious agenda to extend inspections beyond the Big 4, the PCAOB should reflect on its experiences during both the 2004 and 2005 inspection programs and evaluate its procedures. For example, are the inspections structured so they will help restore the credibility of the audit function? More importantly, will the PCAOB's inspection process uncover the underlying auditing and reporting problems that led to the creation of the Sarbanes-Oxley Act? Probably not.

THE PROBLEM WITH AFTER-THE-FACT INSPECTIONS

Since auditors who conduct the inspections come from the same industry as the firms they inspect and, hence, are trained in the same conventional methodologies, it would be surprising to find that the PCAOB developed innovative approaches in the inspection process. Taking full advantage of the PCAOB's power requires that its inspections do more than simply replicate the old peer review system it replaced. Instead, the PCAOB must apply new perspectives and new technologies to fundamentally reengineer the way it monitors auditors. The result will be improvements in the way auditors conduct their work.

The 2004 and 2005 inspections indicate that the PCAOB intends to use engagement audits as the main instrument to conduct inspections. The engagementfocused approach can certainly lead to some useful information about how audit firms operate, but how much the PCAOB learns clearly depends on how it chooses the sample. If the Board's objective is to serve as a second line of defense against fraud that may go undetected in the primary audit, then reviewing engagement audits may be a flawed approach. The selection procedures should focus on minimizing audit failures. For example, the selection procedures could be directed toward "areas of interest" identified rather than on an engagement basis. This methodology may be applied as follows. Should the PCAOB uncover a recurring significant deficiency in audit methodology or the application of generally accepted auditing standards (GAAS) and/or principles during its inspection of an audit firm, it would shift its emphasis from an engagement basis to a more pervasive review of the deficiency identified (i.e., an "area of interest"). An "area of interest" may minimize potential future audit failures for those engagements not selected in the PCAOB's inspection process.

Another issue is whether expanding the sample size almost tenfold in 2005 without any fundamental changes in procedure resulted in more thorough inspections of each engagement than the 2004 inspections. This raises the most compelling criticism of the PCAOB inspection process—whether it's really different in effectiveness from the peer review system it replaced. Arguably, the only difference between the two is that the PCAOB has statutory authority and sanctions that it can apply to firms that haven't complied with its standards in applying GAAS.

So why do after-the-fact inspections? A justification for an inspection program is to serve as a deterrent to bad auditing, but deterrents work only if they're credible. For example, the PCAOB can come down hard on audit firms when the inspection team finds a serious flaw in an engagement by doing one of the following things:

De-register an audit firm, or

◆ Publicly reveal enough information about the firm that could lead to crippling litigation. (The PCAOB has the option—and statutory authority—to refer firms to the Securities & Exchange Commission's Division of Enforcement if it finds egregious application of GAAS [e.g., intentionally ignore and/or overlook GAAS in the performance of an audit] and/or GAAP during its inspection.)

Similar to an audit, the PCAOB's inspection program is an after-the-fact process. While the Board has the authority to sanction auditing firms, a better approach is to focus on improving the audit process and helping prevent problems rather than catching errors that have already occurred.

Although inspecting engagements will help audit firms conduct subsequent audits better, the PCAOB approach may not improve the 95% of the engagements that aren't included in its inspection program and provides no protection for the industry if one of those unexamined engagements ends in a spectacular failure.

PREVENTION IS THE BEST MEDICINE

Consider the provisions of Section 404 of the Sarbanes-Oxley Act that require senior management to certify effectiveness of the company's internal controls, with the auditor then attesting to such certification. A glaring absence in the SOX regulatory framework is a 404-type requirement on audit firms themselves with regard to the controls on their audit engagements. As part of its inspection process, the PCAOB already fills that gap somewhat by reviewing the audit firm's procedures regarding audits, including the firm's quality control processes. But making controls more of a priority will help the firm improve how it does an audit in the first place rather than catch a poorly done audit.

The preventive rather than corrective paradigm underlies Total Quality Control: Aim to produce no defects. TQC is a measurement-based approach to quality performance that's built into all areas of a process from design to delivery. American manufacturers have successfully used TQC for a long time, so there's no reason why we can't apply those principles as successfully to auditing.

Such a TQC approach suggests adopting a controlbased perspective toward earnings management, under which the auditor's role and accounting standards are reframed as components of a management control problem. With such a perspective, the position of inspections in the environment in which auditing and reporting take place isn't an end in itself—it's a means toward the end of better accounting, governance, and auditing. For example, if a position is taken that Big 4 firms are considered too large to fail, then it's more productive to recast inspections as a mechanism to produce better audits by being only one part of a comprehensive and tightly linked set of controls that encompasses managers, auditors, standards setters, and regulators. Ironically, the audit profession itself has long sold audits as a means of generating broader, value-relevant information about the firm, and it would be a natural extension for the PCAOB to adopt that attitude when it inspects audit firms.

A more appropriate approach may be for the PCAOB to begin from scratch and ask what the optimal method of assuring auditing processes is and if the necessary controls are in place, thereby minimizing potential risk of audit failures. This approach takes advantage of both innovative perspectives and emerging technologies to facilitate more effective inspections. It's much like the difference in perspective between reengineering and automation. For example, as businesses recognized as far back as the 1980s, the full benefits of technology come about only when processes are first reengineered to take advantage of the new capabilities that the technology makes possible. As the reengineering pioneer Michael Hammer succinctly put it: Don't automate, obliterate!

AUDIT DATA TO GUIDE OTHER AUDITS

Reengineering the PCAOB inspection process begins by both the company being audited and the auditor taking advantage of new technologies, which can potentially lead to a vast depository of digitized audits. "If it isn't writing, it doesn't exist" is a good theme. Furthermore, the PCAOB could establish a data set based on the industry and compare audit procedures among various accounting firms to determine best practices. With this approach, the PCAOB can develop models that address issues that arise in one auditee that may have pervasive implications.

Industry-specific audit data would probably be more useful for analytic review of audit firms. Each year, the American Institute of Certified Public Accountants (AICPA) develops audit risk alerts for both general and industry-specific issues to help auditors address these risks in current audits. But the organization bases these alerts on discussions with auditors and other information, not on data from audits.

What's unique about the PCAOB is that it can collect data based on its inspection of audit firms and could request such information to develop guidance for auditors. For example, the PCAOB's 2004 inspection program identified EITF 95-22 as a potential area in which firms were misapplying the EITF's consensus on how to classify revolving credit agreements. It could compile and share this data so other companies won't misapply EITF 95-22. Moreover, the PCAOB could coordinate with the SEC's Division of Corporate Finance and Division of Enforcement to obtain their views on SEC filings and enforcement cases. Through the use of an "inspection audit warehouse," the PCAOB would have available information obtained from its inspection program or from discussions with the SEC on its findings during its review of registrants' filings that could be provided to audit firms in the form of guidance in performing current and/or future audits to minimize potential audit failures.

Sophisticated technology tools then could be applied against this data set to provide real-time monitoring of audit procedures and develop models of emerging audit failures. Continuous processes that have been developed by software vendors should be explored to determine their applicability in assisting the PCAOB in identifying potential audit risks. This would also enable the Board to take advantage of a major new capability—the ability to benchmark across audit firms and to find both discrepancies as well as best practices.

Ideally, what the PCAOB needs is a monitoring system, as real-time as possible, that incorporates a large set of business rules based on statistical analysis. This system would not call attention to unhealthy high-audit-risk firms but to profiles of audit failure. It would issue alarms on the attributes of potential audit failures and provide guidance to auditors to be alert for the existence of such attributes in their audit. This guidance would provide the auditor the opportunity to address potential audit failures prior to issuing an opinion. It would also create a set of discriminate analysis-based scores on the likelihood of audit failure to help solve the key problem of PCAOB oversight, which is sample selection. This system would be used both by the PCAOB as well as the SEC's Division of Corporate Finance and Division of Enforcement. Conceivably, the Board could require more detailed segmentbased information to compute these scores, and this data (like IRS filings) would not be in the public domain. Alternatively, the PCAOB could recommend an audit procedure based on real-time monitoring that CPA firms could implement using continuous audit methodology.

Also, corporate management accountants should provide key cost and nonfinancial data directly to the SEC and the PCAOB so they can independently evaluate how well such data supports audit results. Disclosures and submissions to the PCAOB should include full eXtensible Business Reporting Language (XBRL) and/or XBRL GL While the **log file** can't replicate the audit in every detail, **it will help unravel the critical decisions** that led to corporate and audit failure.



tagging, and some reports should be required to be automatically submitted by corporate enterprise resource planning (ERP) systems (e.g., SAP or Oracle). Perhaps working through the Institute of Management Accountants (IMA®), management accountants can play a role in developing standards for such communications that would facilitate more comprehensive and thorough audits.

THE BLACK BOX: IDENTIFYING WHAT WENT WRONG

Combining continuous auditing technologies and a TQC paradigm to reengineer the PCAOB's inspection process creates an audit trail of an audit. This approach uses a "black box log file" that is a read-only, third-partycontrolled record of the auditors' actions, especially in regard to their interactions with management and choice of audit metrics and models.

The log file is analogous to the black box on commercial airliners and a security camera in a retail store. A plane's black box can't fly the plane or prevent crashes, but it can help identify what went wrong. Similarly, while the log file can't replicate the audit in every detail, it will help unravel the critical decisions that led to corporate and audit failure. A critical difference, however, is that, unlike the plane's black box, the knowledge that there will be transparency subsequent to the engagement will have a deterrent effect while the audit is being conducted.

The log files will enable an efficient and effective PCAOB inspection of a much larger set of audit engagements because they are comprehensive and secure in a way that the current system of working papers isn't. Since sophisticated search and analytic algorithms accompany the log files, the degree of comprehensiveness is hard to imagine.

Such a system would enable the PCAOB to carry out

smarter, more useful inspections than it can now by, for example, inspecting a particular transaction across all engagements rather than all transactions at one engagement. An electronic approach that provides information on a particular transaction across all engagements of an auditing firm would substantially improve current processes. This procedure would provide ongoing feedback about gaps in accounting or auditing standards or how recently issued standards are being implemented.

Care must be taken, however, that logs are only examined during the inspection process or in the event of mismanaged earnings, rather than on a real-time basis, for the latter would entail the PCAOB becoming too closely identified with the audit. It would be like the PCAOB being part of the audit team and determining audit procedures and audit judgments on management estimates. Alternatively, the Board's role could be redefined with the SEC picking up the conflicting functions.

While an auditor checks whether a firm has prepared income in accordance with GAAP, the auditor isn't responsible for developing GAAP. By contrast, the PCAOB audits auditors and now also has the duty to develop audit standards. This suggests that inspections should provide a mechanism to understand and improve the way in which auditing takes place, something that can't happen if the inspections use traditional methodologies to perpetuate the current system.

Without innovatively applying technology to reengineer the inspection process, it's hard to conclude that the PCAOB's new powers to restore the profession's credibility will be fully realized. The PCAOB needs to rethink how a properly configured audit inspection system imaginatively using the latest information technology can be part of a systematic continuous improvement process that leads to audits that better serve the needs of financial markets and shareholders. The after-the-fact inspection reports on audit failures will only continue to ensconce in the public arena, and the question will be "Where were the auditors?"

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An update on the PCAOB is a topic at IMA's Annual Conference June 17–21. For details, visit www.imaconference.org.