FLASH ALERT

The Institute of Internal Auditors | Audit Executive Center

Technology "Laggers" Vs. "Embracers": CAEs Discuss Technology Performance Gap

The Institute of Internal Auditor's (IIA's) Audit Executive Center conducted a survey in March 2011 asking more than 500 chief audit executives (CAEs) key questions about emerging internal audit trends and leading practices.[1] Included in the survey were questions aimed at understanding how internal auditors rate the importance of, and their performance in, effectively leveraging technology. Not surprisingly, survey results indicate that many CAEs place a high level of importance on the ability to effectively leverage technology — 77 percent of survey participants rated "effectively leveraging technology" as important to highly important in the performance of internal audit work. (Refer to Tables 1–5 for a detailed explanation of survey results pertaining to the importance and use of technology for audit efforts.)

The fact that CAEs consider the use of technology an integral part of their internal audit function is not surprising, given technology developments in their parent organizations. Over the last few years, technology use has continued to increase steadily in organizations around the world. More sophisticated technologies and systems are being deployed that provide increased functionality at lower costs than their predecessors. Furthermore, budget pressures and staff reductions over the last three years forced many organizations to reengineer existing business processes, which often included using new technologies to facilitate the redesigned processes.

Key Takeaways for CAEs

The Audit Executive Center posed a series questions to 25 Fortune 250 chief audit executives attending a March 2011 IIA roundtable in Las Vegas to identify obstacles to leveraging technology effectively and to determine how to keep pace with the use of technology in today's business world.

Obstacles

- ✓ Lack of a defined internal audit IT strategy.
- ✓ Lack of an internal audit data strategy.
- ✓ Lack of knowledge of how to use newly deployed technology, which often leads internal auditors to revert to manual processes or the prior tool they were using.
- ✓ Internal competition for technology dollars, which leads CAEs to hesitate in asking for, or being successful in obtaining, adequate IT resources and funding.
- ✓ Unrealistic expectations regarding what the tool can do.

Recommendations

- ✓ Implement the right infrastructure for successful technology deployment and use.
- ✓ Agree on a technology strategy that includes a related data strategy.
- ✓ Analyze the resources and skills you need to execute the strategy.
- ✓ Ensure that you have the appropriate dedicated resources to enable your technology strategy.
- ✓ Develop knowledge management and sharing processes to support the strategy.

[1] A total of 514 CAEs participated in the March 2011 survey, Emerging Trends and Leading Practices. The top three industries represented in the survey are financial services/banking/real estate (20 percent), manufacturing (10 percent), and insurance carriers/agents (7 percent). Most CAEs lead internal audit functions consisting of 3–6 (35 percent) and 7–15 (23 percent) full-time internal auditors and work in organizations with annual revenues of US $1 billion or more (47 percent).

The Center's March 2011 CAE survey reflects this last point as more than half of all CAE respondents use technology for ongoing internal audit day-to-day activities. The top three areas where technology is leveraged are data analysis, workpaper management, and management of findings and issues, areas where efficiency and cost-effectiveness can go a long way in enhancing the delivery of value-added services.

> There is ample room for improvement if the marriage between technology and enhanced internal audit performance is to solidify.

However, survey results also appear to highlight that there is ample room for improvement if the marriage between technology and enhanced internal audit performance is to solidify. Although many CAEs are using computer-assisted audit tools, almost half of the CAEs responding to the March 2011 survey (48 percent) stated that their level of performance in effectively leveraging technology was limited to inadequate, while only 14 percent rated their team's performance in leveraging technology as above average (12 percent) to exceptional (2 percent). These results point to a visible gap between how CAEs rate the importance of technology and how they are actually using technology to improve or enhance internal audit performance.

"As these survey results illustrate, internal audit professionals are still trying to find the best way to effectively use technology," says IIA President and CEO Richard Chambers, CIA, CGAP, CCSA. "The question then is, how can internal auditors maximize their use of technology, especially at a time when our organizations are getting even more technology dependent?"

Technology Obstacles and Recommendations

To obtain guidance on ways CAEs can close the technology performance gap, the Audit Executive Center posed a series questions to 25 Fortune 250 CAEs attending a March IIA roundtable in Las Vegas. The aim of the questions was to identify obstacles to leveraging technology effectively and to determine how to keep pace with the use of technology in today's business world.

> The No. 1 obstacle leading to the ineffective use of automated audit tools is lack of a defined internal audit IT strategy.

Although roundtable attendees agreed that the importance and influence of technology in the internal audit profession cannot be ignored and the maturity of audit tools has evolved substantially, they noted a number of IT barriers and obstacles. Specifically, CAEs discussed the difference between approaching technology on a piece-meal, tool-by-tool basis, as opposed to developing and implementing a well-crafted IT strategy. In fact, some said that the No. 1 obstacle leading to the ineffective use of automated audit tools is the lack of a defined internal audit IT strategy. As one roundtable participant explained, lack of such a strategy can lead to misuse or underuse of any tool. Participants also noted the importance of having an internal audit IT strategy

and plan that is consistent with and tailored to the organization's overall technology strategy. Finally, roundtable attendees stated that creation of an internal audit IT strategy and plan enables CAEs to implement resource, budget, and staffing efforts that are in line with the department's technology-use goals.

Similarly, lack of a data strategy was cited as a key obstacle. "If you do not understand the data that you are dealing with and what they represent, as well as what you need," explains a CAE from a Fortune 250 chemical manufacturer, "you will not fully leverage the tools available to you to explore the data in more depth." Roundtable participants agreed with the importance of having a data strategy, some adding that the data strategy is not well-understood and not well-developed in many audit departments.

Attendees discussed three additional obstacles during the roundtable session:

Lack of knowledge of how to use newly deployed technology, which often leads internal auditors to revert to manual processes or the prior tool they were using. Further reflecting this need for skills and training, 66 percent of CAEs responding to PricewaterhouseCoopers' 2011 State of the Internal Audit Profession Study said specialized technology expertise is one of the areas where new skills and capabilities are needed most.

Internal competition for technology dollars, which leads CAEs to hesitate in asking for, or being successful in obtaining, adequate IT resources and funding. Continuing budget constraints call for justification for new technology purchases. Thus, CAEs should develop a long-term internal audit IT strategy with corresponding budget requirements. It also may be beneficial for CAEs to discuss internal audit technology requirements and budgets with key stakeholders so that they in turn can support internal auditing's need for newer technologies.

Unrealistic expectations regarding what the tool can do. "Everyone wants to be 'world-class' in a week," expresses a roundtable participant. "However, use of any technology, as with any other business initiative, has to undergo a capability maturity model." As a result, it is important for CAEs to identify any gaps pertaining to their team's actual and ideal level of expertise with a particular technology and chart how the entire team is to progress along the tool's capability maturity continuum.

At the end of the discussion, CAEs participating at the roundtable identified key steps to counteract the above-mentioned obstacles and to keep up with today's complex technological innovations:

Implement the right infrastructure for technology deployment and use.

- ✓ Have you integrated the audit IT strategy with the organization's overall IT plan?
- ✓ Do you have the appropriate training plan in place?
- ✓ Have you set realistic expectations and goals for your technology strategy?
- ✓ Have you aligned your technology capabilities with your audit processes?
- ✓ Have you held your internal audit staff accountable for the use of technology?

Agree on a technology strategy that includes a related data strategy.

- ✓ What is the intended purpose of the technology strategy?
- ✓ Have you identified your data needs and specifications?
- ✓ Have you evaluated how each proposed technology tool fits the overall audit plan and its objectives?
- ✓ Have you established a consistent methodology for performing data analysis?

Analyze the resources and skills you need to execute the strategy.

- ✓ Do you know what technology skills and expertise you need?
- ✓ Have you thought about how to access or acquire the necessary skills?
- ✓ Have you considered different approaches, including in-house staff, co-sourcing, or outsourcing, as alternatives to acquire in-depth knowledge on a particular tool?

Ensure that you have the appropriate dedicated resources to enable your technology strategy.

- ✓ Have you identified possible needs such as a data librarian who will be responsible for collecting, formatting, distributing, and safeguarding data used for audit purposes?
- ✓ Have you provided training opportunities that are aligned to your audit IT strategy?
- ✓ Have you developed a training schedule to support the deployment of particular tools?

Develop knowledge management and sharing processes to support the strategy.

- ✓ Have you considered how to share highly effective scripts or macros internally and with other internal audit functions?
- ✓ Have you developed a software library or online knowledge site to centrally store specific software routines or programs?

"As the Center's March 2011 survey and roundtable participants illustrate, technology will continue to play a key role in helping CAEs expand audit coverage, meet stakeholder expectations, and align audit efforts to focus on strategic business areas," Chambers says. "However, it is vital that CAEs make sure their staff are fully leveraging the same tools that are meant to enhance the added value internal auditors bring to their organizations."

Survey Results at a Glance

The IIA's Audit Executive Center March 2011 survey asked respondents to identify the types of tools used for governance, risk, and compliance (GRC) activities, audit management, data analysis, and security monitoring. Although internally developed tools are used in many of the organizations represented by survey participants, the majority of CAEs use commercially available tools.

What's more, nearly a quarter of survey participants are not satisfied with their tool of choice and nearly 50 percent rate their staff's technology performance as limited/developing or inadequate. As is evident, these last two findings call for much-needed improvement in terms of tool performance (i.e., not just actual use of the tool, but also satisfaction with the tool itself) and the level of training provided to maximize technology use and enhance audit efforts.

Table 1. Percent of Respondents Leveraging Technology

	Yes	No
Data analysis	80%	20%
Workpaper management	70%	30%
Managing findings and issues	69%	31%
Substantive testing	66%	34%
Risk assessment activities	60%	40%
Audit planning	60%	40%
Reporting	60%	40%
Communication	54%	46%
Control analysis	50%	50%
Continuous audit activities	42%	58%
Performance management for internal auditing	38%	62%

Table 2. Tools Used to Leverage Internal Audit Efforts

	Data Analysis	GRC System	Security Monitoring	Audit Management
Risk assessment activities	33%	8%	5%	29%
Audit planning	30%	4%	4%	39%
Control analysis	30%	9%	8%	23%
Data analysis	64%	2%	5%	12%
Substantive testing	43%	4%	8%	22%
Workpaper management	8%	6%	2%	45%
Reporting	6%	4%	2%	35%
Managing findings and issues	9%	7%	2%	38%
Performance management for internal auditing	8%	1%	1%	19%
Communication	5%	2%	2%	24%
Continuous audit activities	32%	3%	5%	10%

Table 3. Type of Tool Used

	Commercially Available	Internally Developed	Combination	Not Used
Data analysis tools	60%	13%	16%	11%
GRC systems	22%	9%	2%	67%
Security monitoring tools	26%	11%	10%	53%
Audit management tools	42%	23%	11%	24%
Other tools	35%	20%	14%	31%

Table 4. Level of Satisfaction Per Type of Tool

	Not Satisfied	Needs Improvement	Satisfied	Extremely Satisfied
Data analysis tools	1%	22%	67%	10%
GRC systems	9%	30%	53%	8%
Security monitoring tools	5%	23%	67%	5%
Audit management tools	3%	27%	56%	14%
Other tools	1%	24%	68%	7%

Table 5. Level of Importance and Performance in Leveraging Technology

Attribute	Scale				
Level of Importance	Not important	Somewhat important	Important	Very important	Extremely important
	4%	19%	37%	31%	9%
Level of Performance	Inadequate	Limited/ developing	Adequate	Above average	Exceptional
	8%	40%	38%	12%	2%