



# Enhancing Audit Technology Effectiveness

## Key Insights from TeamMate's 2011 Global Technology Survey

### ***Data Provides Baseline for Comparisons, Suggests 5-Step Framework for Increasing Technology Value***

The 2011 TeamMate Internal Audit Technology Survey (IATS), launched this year, is the first step in a new thought leadership program designed to help internal auditors make more effective use of technology and gain more value from their technology investments. Through research, analysis, and surveys of its global user base, TeamMate is developing new ideas about how to leverage the power of technology to improve internal audit performance.

For TeamMate, the IATS achieves two key objectives, according to Mike Gowell, TeamMate vice president and general manager: "First, it provides TeamMate Audit Management System users and TeamMate management with a baseline of responses to questions dealing with internal audit trends and directions, such as current tools in use and year-over-year spending on technology; second, it provides key insights about how internal audit functions can make more effective use of technology. Tapping into our community of TeamMate users gives us and members of the audit community a unique opportunity to see how leading internal audit departments are leveraging technology."

With baseline data from the IATS, which TeamMate plans to update annually, internal auditors will be able to compare their assessments of how well they are deploying technology against similar perceptions from a wide base of internal audit groups. In addition, survey results for the topical section of the 2011 survey provide specific feedback on the degree to which internal audit groups are utilizing technology to improve their operations.

#### **Survey Background**

A total of 585 TeamMate users from across the globe responded to the survey, which was conducted in September of this year.

In terms of primary geographical distribution, 66% of respondents come from North America, 20% from Europe and the Middle East, and 9% from Asia; respondents also included TeamMate users in Africa and South America.

Looking at the primary types of organizations represented by respondents, 35% are from public companies, 30% from governmental agencies, 22% from private corporations, and 6% from not-for-profit corporations.

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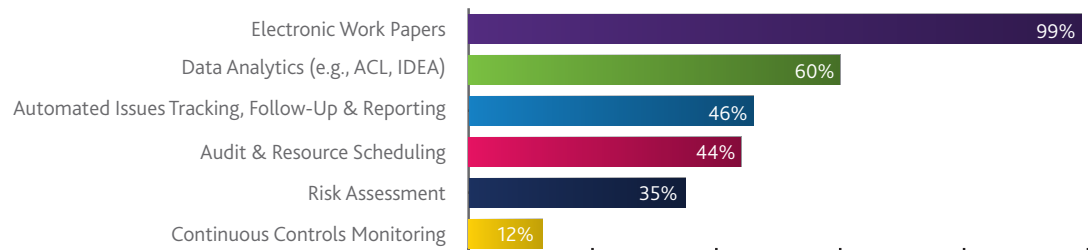
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### Baseline Survey Results

#### EWP & Data Analytics Lead Technology Usage

Baseline data from the 2011 TeamMate IATS provides an initial picture of technology usage by TeamMate users. According to survey results, there is a clear focus on Electronic Work Papers (EWP), employed by nearly all TeamMate users, and tools for data analytics, such as ACL and IDEA, which are used by more than 60% of survey respondents (see Chart 1).

**Chart 1:**  
*Technology Usage*  
**Technology Tools in Current Use**



What's more, nearly half of respondents report using Automated Issues Tracking, Follow-Up & Reporting tools, and nearly the same number are using Audit & Resource Scheduling software. At the same time, only about a third of survey respondents use a risk assessment tool, and continuous monitoring tools appear to be in early stages of deployment. On a collective basis, these trends suggest a gradual progression in the scope of risks being addressed by internal audit groups around the world.

Given the increased focus on risk among internal audit groups, a trend confirmed by research from The Institute of Internal Auditors (IIA) and other parties, it is not surprising that tools for risk assessment are projected for the biggest near-term increase in usage among survey respondents (see Chart 2).

**Chart 2:**  
*Future Use of Technology*

Over the next two years, we expect our use of each of the following tools to increase:	Rank
Risk Assessment	1
Automated Issues Tracking, Follow-Up & Reporting	2
Data Analytics (e.g., ACL, IDEA)	3
Audit & Resource Scheduling	4
Continuous Controls Monitoring	5

In fact, when asked to select the most important technology tool for their internal audit department over the next year or two, the majority of survey respondents picked data mining.

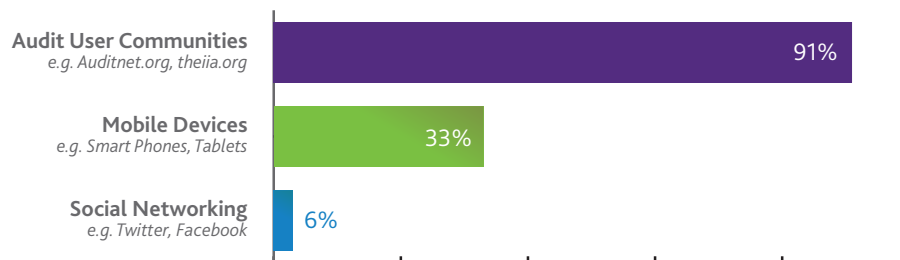
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TeamMate users also anticipate stepped-up use of Automated Issues Tracking, Follow-Up & Reporting software, tools for data analytics such as ACL and IDEA, Audit & Resource Scheduling tools, and continuous controls monitoring techniques.

Looking at technology as a productivity enhancer, the survey found a heavy focus on audit user communities, with a 91% participation rate among survey respondents (see Chart 3). In addition, a third of respondents are using mobile devices, such as smart phones, and some are tapping a variety of social networking tools, including Twitter, Facebook and LinkedIn, to leverage their audit work. These are important trends to monitor going forward.

**Chart 3:**  
Productivity  
Enhancers  
Current Usage



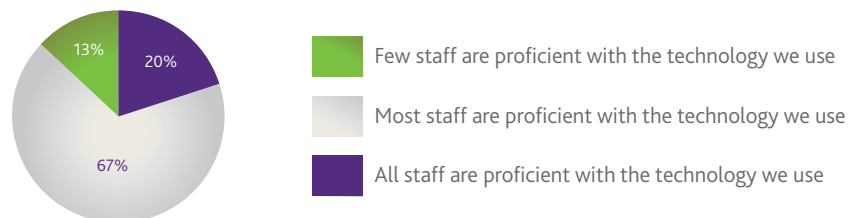
### Budgetary Trends Reflect Increased Technology Focus

Although roughly half (48%) of the 2011 TeamMate IATS respondents foresee little change in their technology budgets, more than 37% experienced an increase in their technology budgets this year, as opposed to only 15% experiencing a decrease. Looking ahead, nearly a third (31%) of respondents expect their technology budgets to increase over the next two years; more than half (55%) expect their technology allocations to stay about the same; and only 14% expect their tech budgets to drop. Collectively, this budget feedback demonstrates a heightened focus on technology, with some TeamMate survey respondents playing catch-up in the technology arena while others are continuing to improve their technological capabilities.

### Technology Skills: Fairly Strong But Room to Improve

For the vast majority of responding organizations, staff proficiency with departmental technology is rated quite highly, with 20% indicating that all staff members are proficient with the technology being used by their departments, while another two-thirds say most of their staff members exhibit such proficiency (see Chart 4). On a collective basis, however, more than 80% of respondents have a way to go in order to achieve the "all-proficiency" designation.

**Chart 4: Staff  
Technology Skills**  
When it comes to  
technology, which  
statement best  
describes your  
internal audit  
skill set?

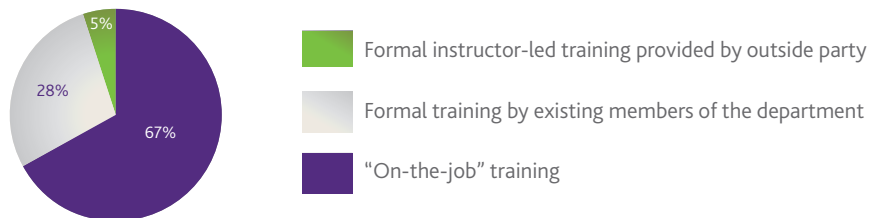


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In a general sense, survey findings related to technology skills likely reflect two key factors: First, the degree to which an internal audit group focuses on technology, and second, the widespread need for additional training for most internal audit groups. When asked to describe their department's approach to providing technology training to new hires, two-thirds of survey respondents said they use informal, on-the-job training as opposed to formal training, whether from members of the department or from an outside instructor (see Chart 5). In weighing the pros and cons of various training alternatives, it's important to assess the consistency and effectiveness of on-the-job training vs. more formal training.

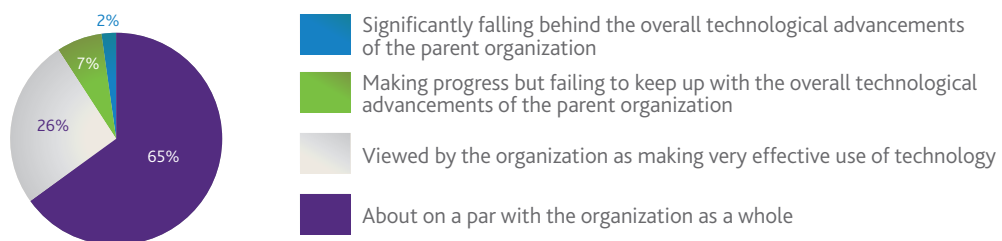
**Chart 5:**  
**Technology Training**  
**Which best describes your technology training for new hires?**



### Keeping Up with the Organization

When asked to compare their internal audit group's use of technology with that of their parent organizations, nearly two-thirds (65%) of survey respondents rated themselves roughly on a par with the organization as a whole (see Chart 6). In addition, slightly more than a quarter of respondents say their parent organizations believe they are making "very effective" use of technology. Lest you become too comfortable with your technological capabilities, however, keep in mind that a recent Common Body of Knowledge (CBOK) study of internal audit stakeholders by The IIA showed that internal audit groups tend to rate themselves more highly than do their chief stakeholders.

**Chart 6:**  
**Keeping Up with the Organization**  
**Relative to the overall use of technology by our company, the internal audit group is:**





# How to Increase Technology Value

## *A 5-Step Strategic Framework from TeamMate*

Data from TeamMate's 2011 Internal Audit Technology Survey (IATS) suggests that internal auditors have ample room for improvement when it comes to making effective use of technology. According to self-assessments by survey participants, 76% of respondents rate their performance as "inadequate, marginal or adequate" while only 24% rate themselves as above average or exceptional. The key success factor: Good business practices applied to the use of technology. Although the survey focuses on technology, it is clear that non-technology factors do much to drive higher levels of performance.

An analysis of survey results points to a strong link between five key internal audit practices and utilizing technology more effectively. These correlations suggest the following 5-step plan for boosting technology value:

1. **Convey the right "Tone at the Top"**
2. **Place a high priority on leveraging technology to boost performance**
3. **Hire technology skills selectively**
4. **Train, train, train**
5. **Measure what really matters**

### **Step 1: Convey the Right "Tone at the Top"**

What single factor does the most to enhance technology effectiveness? According to input from 2011 TeamMate IATS respondents, the clear answer is Chief Audit Executive (CAE) leadership, which provides a strong foundation for Steps 2-5 and without which the strategic framework cannot exist.

Having the right "Tone at the Top" of the internal audit function, reflected by strong leadership and support from the chief audit executive, was cited by a number of survey participants as the key factor in improving technology value at their organizations. Through effective leadership, survey respondents suggest, CAEs can set the right tone and focus for the internal audit function.

CAE leadership is also a key factor in the relationship between internal audit and management, an important consideration when it comes to financing an internal audit activity. Gaining management support is a critical factor in getting the budget needed to implement a technology strategy, a key consideration given that inadequate budgets are the second most cited barrier to achieving greater success with technology, according to IATS respondents. Effective leadership of the internal audit function is needed to address such barriers.



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CAE tone also determines whether an internal audit group views technology as a tactical or strategic priority. This is an important consideration given that only 23% of the IATS respondents describe enhancing the use of technology within their department as a major strategic priority. That percentage raises a basic question: If an internal audit group fails to treat technology as a strategic priority, and fails to measure its impact, how can it expect to be considered “above average” or “exceptional” in its use of technology?

CAE leadership also can ensure that there is clarity about the anticipated benefits from technology within an internal audit function. Using clear communications, the CAE can do much to help the internal audit staff understand the anticipated benefits from a strong focus on technology, starting with more efficient audits. So it is not surprising that *conducting more efficient audits* was cited by more than 64% of 2011 IATS survey respondents as their top perceived benefit in the technology arena. Survey participants also cited *willingness to change* as a key factor in leveraging technology to improve internal audit processes. Of note, “Step Up Your Use of Audit Technology and Tools” is one of the **10 Imperatives for Change** stemming from The IIA’s 2010 Global Internal Audit Survey.

### Step 2: Place a High Priority on Leveraging Technology to Boost Performance

To reinforce the importance of technology, it is imperative that members of your staff both *understand* and *use* the technology tools available to them and that they employ technology on all audits. Having the competence to work in Excel, Access, or other technological applications needs to be viewed as an *expectation* as opposed to a “nice-to-have” capability.

Some 2011 IATS respondents have already adopted policies to this effect. For instance, one internal audit group requires its auditors to consider the use of data mining technology during the planning for every audit. Another internal audit group insists that data mining and Computer-Assisted Auditing Techniques (CAATs) be a goal for every audit. Additionally, multiple organizations require that all audit work be documented using Electronic Work Papers (EWP).

### Step 3: Hire Technology Skills Selectively

Having adequate technology skills within the internal audit department was cited by 52% of the 2011 IATS respondents as the most important factor in improving their ability to make good use of technology. At the same time, respondents cited the inability to dedicate sufficient staff to technology-related activities and the lack of technology skills and training as major barriers to making more effective use of technology.



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To address these obstacles, a number of TeamMate user groups are hiring outside talent with strong technology skills in areas such as data analytics or data mining to jump-start implementation of major technology initiatives. Such hiring, they say, helps shorten the learning curve for new hires and speeds up implementation of technology solutions. In addition, hiring experienced staff with strong or expert-level skills in data mining or other key aspect of technology to augment in-house capabilities also enables organizations to ascend the technology maturity curve, moving up from a mastery of electronic work papers to tapping the potential of data-mining solutions.

To establish a strong foundation for strengthening technology skill sets, internal audit groups are advised to consider establishing a technology champion to challenge manual audit processes.

### **Step 4: Train, Train, Train ...**

Despite the importance of the right “Tone at the Top” and technology skill sets, training does more than any other practice to help respondents utilize technology more effectively, according to the 2011 IATS results. In response to an open-ended question receiving dozens of responses, more than 50 survey respondents identified some form of on-the-job or formal training, whether delivered by in-house staff or a third party, as having done the most to help them enhance technology value and effectiveness.

Keep in mind, however, that technical skills fade quickly if they are not used; the “use it or lose it” saying has definite application when it comes to complex technology requiring frequent use in order to master and retain what is learned. For this reason, it is useful to conduct a strategic analysis of your training needs when it comes to technology, a process that includes determining what levels of proficiency are required for various members of your group in order to achieve departmental objectives. You may only need one expert in data mining or data analytics, for example, and this expert, in turn, would be asked to train others in the department in a systematic manner.

### **Step 5: Measure What Really Matters**

One key aspect of The IIA’s 2010 Global Internal Audit Survey dealt with projections of internal audit focus over the next five years. Nearly 20% of the respondents to that survey projected that they would be spending more of their professional time on reviews addressing the linkage between strategy and company performance, an activity often utilizing balanced scorecards for analysis.

As the global emphasis on technology has increased, a number of internal audit organizations are also implementing performance measures to assess the effectiveness of their technology efforts.



# How to Increase Technology Value

## *A 5-Step Strategic Framework from TeamMate*

The need for performance measures is readily apparent given responses to the TeamMate Internal Audit Technology Survey:

- According to self-assessments by survey participants mentioned previously, 76% of respondents rate their performance as “inadequate, marginal or adequate” while only 24% rate themselves as above average or exceptional.
- In responding to two related survey questions, 80% of survey participants indicated they lacked performance measures to determine how effectively they are leveraging technology and 73% reported that they did not track or measure the extent to which they utilize technology to perform audits.

Is there a direct relationship between the lack of performance measurement and tracking and overall levels of performance? Developing and implementing a solid program of performance measures could provide the “missing link” required for some organizations to benefit from more effective use of their technology capabilities and resources.

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