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Introduction

TeamMate Audit Benchmark is an ongoing assessment of the trends in methodology and work practices of global internal audit teams.

To date, thousands of teams have taken the survey across 120 countries. The teams have received their maturity map mappings and benchmarks, which are then used to plan their path forward in their evolution.

More information about TeamMate Audit Benchmark can be found here:

www.auditbenchmark.com

Responding to change

One of the primary areas TeamMate Audit Benchmark attempts to address is the rate of change or disruption happening in internal audit. Beyond that, we're capturing which functional areas are driving that change and analyzing what that means for the profession.



Rate of change

Based on more than a thousand responses from audit teams varying in size, industry, and country, 54% responded that they're planning to make methodology changes in the next 12 to 24 months. The rate of anticipated change from 2019 to 2022 has progressed from 43% to 54% over the course of 3 years. Outside of the global average, certain regions indicated as many as 67% of audit departments were planning changes. So, not only are more than half of audit departments planning fundamental changes in the near term, but the number of departments doing so is growing over time.

Key areas of change

Although many departments were not initially planning to make significant changes, the shift in circumstances (e.g. changes in the way we work, politics, etc.) globally have required them to react, adjust, and modify their plans for the future. The key areas of change are:

- Continuous risk assessments
- Agile audit
- Data analytics

Continuous risk assessments 50% of departments are planning pure methodology changes related to dynamic or continuous risk assessments, continuously updated, and enriched with data from other parts of the organizational ecosystem.

Most internal auditors can relate to a time when the standard was to reassess your audit plan only once a year. In 2020, over the span of just a month, the rate of professional and related occupations rose from roughly 32% to just shy of 75% (Source: US Bureau of Labor Statistics, American Time Use Survey). These fundamental shifts in the way we work have a critical impact on an audit department's perception of organization risk. Considering how quickly the priorities, and in some cases the DNA of an organization can change, audit shops are starting to understand the critical need to continually assess where the real risks live within their organization.



Agile audit

TeamMate Audit Benchmark also reported 53% of internal audit teams are evaluating changes related to agile audit principles to maximize audit coverage and deliver value to the organization. What's more, over a quarter (26%) of audit teams are planning on methodology changes related to agile in the next 12 to 24 months.

Considering the rate of change in audit and the environmental factors driving continuous risk assessments, the growth in adoption of an agile audit workflow makes sense. Audit departments are looking for ways to become more nimble in an increasingly unpredictable and rapidly changing work environment. Agile audit allows departments to work and prioritize in shorter cycles so that they're continually evaluating, prioritizing, and optimizing their work. Traditional work methods lack the flexibility and efficiency to meet the challenges of the modern-day auditor.

Data analytics

The final key area of change is data analytics. Because of the scope and complexity of data analytics, we've separated our evaluation into two key functional areas.

- **Audit analytics** Analytics as a part of every audit; a measure of the breadth of coverage. 47% of respondents indicated that they were already doing this and 42% said that they planned to.
- **Advanced analytics** Using advanced analytics to test complex systems, identify trends, correlations, and predict patterns. 46% of audit departments were planning to do this in the next 12 to 24 months.

Responding to change

The rate at which the audit profession is changing to meet new and abruptly materializing challenges is accelerating. With more than half (54%) of global internal audit teams already embracing the need to be more adaptive and responsive to larger changes in their organizations, it is imperative that every internal audit team evolve their practices and methodology.

Every audit department faces unique challenges on their path to greater maturity. Whether it's optimizing their methodology and approach, use of technology, or adoption of digital skills, TeamMate Audit Benchmark can help guide your department toward growth that helps you respond to change more quickly and more effectively.



The interrelationship between the top three game changers

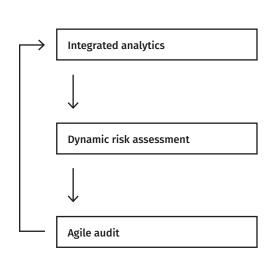
There is a bit of a virtuous cycle going on between the top three game changers.

- 1 A dynamic or continuous risk assessment requires internal auditors to maintain a much more adaptive and flexible audit plan.
- 2 An Agile audit methodology helps deliver more flexible work by breaking it down into consumable chunks, allowing internal auditors to respond to existing business needs, as well as changes that are happening within the risk assessment.
- 3 Integrated analytics are an enabler for Agile audit. They also act as a constant feed for dynamic risk assessment, creating an ongoing relationship between the work internal auditors perform and the assessment of risks.

As you begin this journey to change how your internal audit teams work, focus on one area at a time. However, internal audit teams might find that elements of the other two will start to sneak in. For example:

- You start to implement continuous risk assessment but end up adding Agile principles into your process
- You implement an Agile audit method and add elements of continuous risk assessment

Integrating data analytics completes that cycle of audit work feeding back into risk assessment.



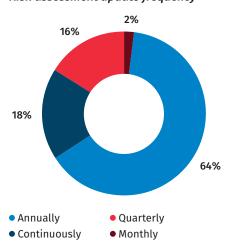
Continuous risk assessment



The chart below shows how frequently internal audit teams update their risk assessment.

- 64 percent update on the traditional annual cycle
- 18 percent are already updating continuously
- Another 16 percent update every quarter, but still as a discrete exercise

Risk assessment update frequency

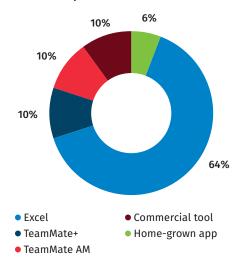


When we look at the tools that are being used to do these updates:

- The majority, 64 percent, are updating in Excel, making it difficult to continuously update risk assessments. Excel also restricts updates to an annual or quarterly exercise.
- The other 36 percent use TeamMate
 AM or TeamMate+, another commercial
 tool, or an application they've developed
 in-house.

Coincidently, both the internal audit teams who perform annual risk assessments and the teams who report using Excel come in at 64 percent; there is no strong correlation between these two points. However, teams who continue to use Excel will find it challenging to implement a more continuous approach unless they move to a purpose-built tool.

Tools used for risk assessment



Moving to Continuous Risk Assessment

When evaluating the workflow following a traditional annual risk assessment process, we see that most teams implement the same steps—interviews are conducted, a risk assessment is performed that results in an approved audit plan, and the plan is executed through to the end of the audit year.



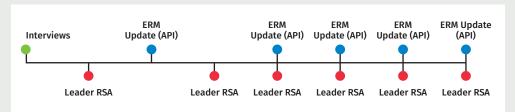
While teams are still executing the end of one audit plan, they are also starting to plan for the next one. Internal audit teams say that this is typically a three-month process.

The challenge is that the engagements that are kicked off at the end of the year are scoped based on planning and data that is at least 15 months old.

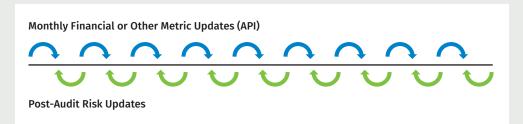
The world is constantly changing, especially when the year is 2020! So much can change within that 15-month cycle that end-of-year audits are not always as relevant or high-priority as they were earlier in the cycle.

We can increase the frequency of risk assessment updates with a quarterly or monthly approach by:

- · Conducting our interviews in the same way
- Integrating risk scores from an enterprise risk management (ERM) system, perhaps brought in via an API
- Incorporating departmental leadership by having them complete risk self-assessments (RSA)

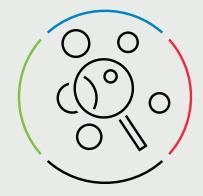


Incorporating this data now means that risk assessments are three months old, at most.



Ultimately, teams can progress to metric feeds, perhaps monthly financials from an enterprise resource planning (ERP) system. It's important to ensure that the audit work we already conduct, such as updating post-audit/ engagement risk scores, can also update risk scores at the end of each engagement. This allows teams to constantly monitor for changes versus historical data and maintain our continuous risk assessment model. We can even trigger a prioritized engagement for an entity or process where the risk has increased significantly.

TeamMate Audit Benchmark found that 35 percent have started their journey toward implementing a more continuous approach.



Making your continuous risk assessment dynamic

Now that teams understand the journey to moving to a continuous risk assessment, it might be worth considering incorporating data analytics into this process before starting the next quarter of audit engagements. The exploratory analysis allows for another assessment point that is not biased by opinions or process knowledge and may result in new insights.

Exploratory analysis can be as simple as obtaining data for an audit area and walking the data using a quick visualization tool, or running a set of exploratory tests created in a pre-configured test format.

Why move to a dynamic risk assessment?

Fundamentally, dynamic risk assessments offer a better way to identify and assess risks because:

- Teams are making decisions based on real-time (or at least recent) data and insights.
- Teams can provide greater coverage without increasing audit resources.
- Audit plans are more accurate because they are based on the latest view of risk.
- It fosters improved collaboration across risk functions because they are all regularly involved in the process.
- Teams can prioritize their audits at any point in time that will provide the most value and address the organization's highest-priority risks.

How do teams implement continuous risk assessments?

TeamMate Audit Benchmark indicates that one of the biggest roadblocks to continuous risk assessment is not having a clear plan of action or an executive sponsor willing to drive those key strategic initiatives.

There are three things that teams can implement more quickly that can deliver significant results without substantial changes to resources and tools.

First, create a plan to move away from Excel as the primary risk planning tool.

Excel is, and will continue to be, an integral part of the audit workflow. But it was never designed to be a dedicated risk management tool.

Sixty-four percent of organizations are still leveraging Excel as their main risk management tool. Teams are better served by taking advantage of the audit management tools they have already invested in, such as TeamMate+, because they provide the foundation for critical data from other functions to enhance the risk assessment.

Second, foster collaboration across risk functions by leveraging the data you already have access to.

Many of the teams who have started this journey are collaborating with their first-and second-line functions.

Collaboration enables risk functions to identify and assess risks more efficiently as they avoid relying on an individual and siloed point of view. Collaboration may include having a shared common source of data or creating a common language to reduce duplication of effort and provide broader risk coverage without substantial investment.

Third, leverage technology to feed historical insights into your risk assessment plan.

You might think that only large internal audit teams leverage APIs to feed historical insights into their risk assessment.

However, Insights from TeamMate Audit Benchmark tells us that 15 percent already use APIs to augment risk assessment, including smaller departments of one to 10 auditors.



Agile audit and agile principles

Teams who perform an annual risk assessment are also more likely to follow a linear process when planning and conducting engagement work and reporting the results.

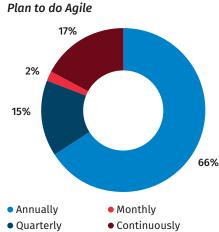


Adopting Agile audit

Many teams are in the early stages of evaluating or adopting Agile principles to conduct their audit work. Changes in the workflow and approach become evident when comparing teams planning to adopt Agile versus those who are executing audit work using Agile.

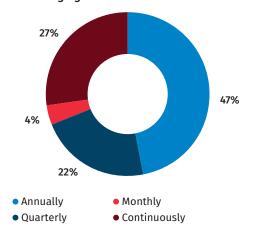
First, let's look at how frequently they update their risk assessment.

Teams who are planning to adopt Agile tend to focus more on the traditional annual risk assessment approach.



Teams who are already executing their audit work using Agile principles update their risk assessments more frequently, with a significant increase in those that do it quarterly, monthly, and most often, continuously.

Executing Agile



When we look at the engagement planning process, internal auditors that have adopted Agile have gone away from full-scope audits, based on all the risks identified in the risk assessment and moved toward:

- Selective scope, choosing only some of the risks identified in the risk assessment and prioritizing highrisk areas first in testing
- Consultative with the business to determine which risks will yield the most value to the organization
- Using sprints to manage workarounds for key or high-risk areas

For the tracking process mechanism, the internal auditors that have adopted Agile have moved away from tracking phases and milestones toward:

- Using estimated or scheduled time versus actual time
- The percentage of work items complete versus total work items
- · Using Kanban boards



What is driving the move to agile?

In the current climate, the traditional approach is failing to meet stakeholder needs for a few reasons.

First, it fails to respond to change.

Risks are changing rapidly, and the audit department can no longer build an audit plan at the beginning of the year and be unwavering to this plan.

Internal audit needs to be constantly scanning for new and emerging risks. It is no longer acceptable to focus on risks that have crystallized.

Boards and audit committees expect audit departments to be more responsive to changes in the risk landscape and pivot to areas of high risk or emerging risk.

Second, it is slow to deliver insights.

Audit duration can range from a few weeks to a few months. In the current business environment, waiting six months to learn the audit findings does not make business sense. In six months, the landscape can change considerably, and failure to act on fundamental control deficiencies or weaknesses over that period could place the organization at considerable risk.

Third, it is not transparent enough.

A top-down, rigid approach lacks effective collaboration and communication within the audit department and with stakeholders.

Traditionally, the audit department builds the annual audit plan, then commits to delivering it. There is a failure to communicate with business leaders about the changing risk profile, which would allow them to shift priorities.

Audit teams need to engage with the business in an open and collaborative manner at the audit engagement level to help them better understand the processes being audited and identify further areas where audit can add value.

How do audit teams implement agile principles in the engagement process?

Be serious about a risk-based audit approach

Focusing only on the areas of significant risk leads to clearly framed objectives. A truly risk-based approach is also a building block of efficiency. With a clearly defined and refined set of objectives, Agile teams do not simply design and execute audit programs for an exhaustive set of risks identified in a risk assessment. In doing so, the Agile audit team now also balances between the promise of reasonable assurance, the risk profile, and resources.

Organize your audit work into sprints

Once audit work is planned by risk priority, chunk it into sprints. Most internal audit teams adopt either one-

or two-week sprints. Work planned at the beginning of the sprint is expected to be completed by the end of the sprint. Daily communication and stand-ups help teams stay on track and are the early warning system for delays. Adopting this cadence ensures a focused approach to performing work and allows teams to pivot at the end of a sprint should resources need to be redeployed to areas of greater importance.

Communicate results on time

Agility is fundamentally adopted to provide timely results. Management needs timely results so that they can act with urgency. An Agile methodology promotes greater collaboration and better communication, promoting better quality and more timely audit outcomes. This collaboration should not be limited to the audit team but should also extend to the audit client to ensure the audit continues to focus on the highest risk areas. And as risks change, auditors need to respond to these changes promptly.

Expanding Data Analytics Capabilities

Data analytics is not new. Over 50 percent of TeamMate Audit Benchmark participants indicate they perform data analytics on every audit. However, that means 50 percent still do not. TeamMate Audit Benchmark has helped us learn why teams have different approaches, and how teams that conduct data analytics have expanded their programs.

Common applications of data analytics

In general, there are four common applications for data analytics within internal audit teams.

Compliance

Compliance activities can be tested using data analytics by evaluating all transactions for compliance with process controls and/or regulatory requirements.

Data analytics testing is also used to identify anomalies and reveal trends before they become more serious.

Fraud Detection and Risk Assessment

Internal Audit should always be on the lookout for opportunities and evidence of fraud. Data analytics can help identify areas particularly susceptible to fraud, including in-house and across supply chains, and assess the design and effectiveness of controls.

Data analytics is also used to find anomalies within data sets that might indicate instances of fraud, and in investigating fraud to find the source and compile evidence.

Operational Performance

Teams use data analytics to identify key operating metrics, key performance indicators (KPIs), and key risk indicators (KRIs), and monitor them to spot potential issues.

Data analytics can also be used to identify redundancies or inefficiencies in systems and processes.

Internal Controls

More advanced data analytics are often used in the internal controls testing process to identify weaknesses or failures in controls, especially key controls and to monitor the performance of controls.

We asked respondents about the different forms of data analytics they have adopted, and 50 percent said they apply data analytics to every audit. Most of the remaining respondents said they plan to implement data analytics soon. And a large number were also either executing or planning to incorporate continuous testing.

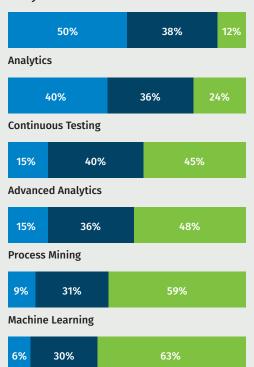
When we look at more emerging techniques, such as:

- Using advanced analytics to identify trends and correlations
- Process mining to understand process flows and divergences
- · Applying machine learning
- Using Robotic Process Automation to extract data or test routine areas

These tools were much less common with

respondents, with only a small proportion using them already and nearly one-third considering them for the future.

Analytics-Related Activities



Robotic Process Automation

- Executing
- Plan to do
- Not executing

In the areas where data analytics are focused, as you might expect, financial transactions and operational data are the most popular, by far.

Using analytics to test controls seems to be less common.

Focus on Data Analytics

88%

Financial Transactions

79%

Operational Data

49%

Data Processing

43%

IT Controls

34%

Financial Controls

The growing importance of data analytics

Experts and analysts have been encouraging, and even demanding, that Internal Audit adopt data analytics for years, if not decades. The growing importance of data analytics in 2020 is linked to the ideas previously discussed about continuous risk assessment and Agile drivers.

- Data analytics provide a feed to your continuous risk assessment.
- Data analytics enable you to provide greater value to your organization.
- Data analytics increase the level of assurance with 100 percent coverage instead of sampling.
- Detailed, quantified findings enhance credibility with stakeholders.
- Data analytics allow you to test faster and with more agility.
- Given our new work-from-home arrangements, data analytics are a real enabler for remote working.

However, reviewing the maturity level for data analytics, most teams are at the fact collector's level, meaning they need to increase the value they deliver using data analytics.

Maturity map - data analytics

58%

Fact Collectors

9%

Info/File Managers

11%

Business Advisors

15%

Value Accelerators

7%

Trail Blazers

While the percentage of teams who are advancing their data analytics programs is still quite low, participants indicated a desire to achieve more.

The TeamMate Audit Benchmark survey asked, "What percentage of your audit plan scope could be automated by 2024," and the averages across all categories were surprisingly high.

This tells us that teams are planning to put quite a lot of focus on automation over the next three-to-four years!

What percentage of your audit plan should be automated by 2024

50%

IT Access Control Testing

47%

Population Testing

47%

Automated Data Process Testing

45%

Routine Control Testing

43%

Risk Assessment Scoring

40%

Key Risk Indicator Identification

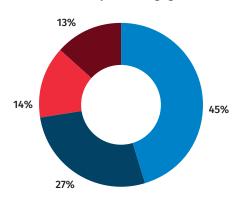
29%

Scenario Watching

How to get started with a data analytics program

TeamMate Audit Benchmark asked whether teams require data analytics to be used on every audit engagement, and 45 percent responded, "yes."

Does our team require data analytics to be used on every audit engagement?



5% - Automating

8% - Ad Hoc

15% - Auditors and Specialists

17% - Rely on Specialists

Yes

- No, lack tools
- No, lack skillsNo, not required

Drilling down on those that do require data analytics on every audit revealed varying levels of depth and breadth with their programs.

- 17 percent rely on specialists to complete all their data analytics work, which can create bottlenecks and roadblocks to the timely completion of audit work.
- 15 percent augment their specialists by ensuring all staff have some level of data analytics skills and often implement more than one tool to accomplish this.
- 8 percent perform ad hoc testing in addition to standard testing, which is generally an exploration of data without a defined hypothesis for testing.
- 5 percent have expanded their data analytics programs to include automating some of their testing routines.

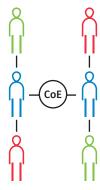
The remaining 55 percent of teams who are not requiring data analytics on every audit do so because:

- They don't have enough skills or resources.
- They don't have a data analytics tool.
- They don't believe it's necessary.

Upskilling for data analytics

In TeamMate Audit Benchmark, 27 percent of participants indicate their teams do not have the right skills. This can be overcome by organizing your data analytics capability. Some teams have tried to give everybody access to an analytics tool and leave them to work out how to apply it. This approach often fails as training is generic, new skills are not applied right away, and too much of the learning is forgotten by the time the auditor has an opportunity to apply the skill.

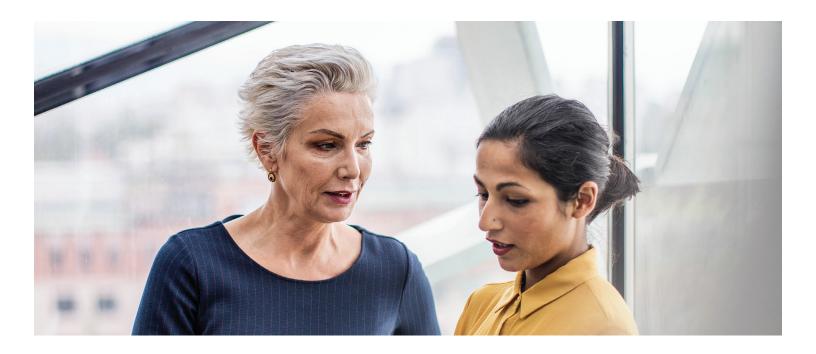
One thing that works particularly well for embedding analytics into every audit is establishing a center of excellence staffed by specialists, coupled with regular auditors who can perform their own analytics, and supported by data analytics champions. Data analytics champions are auditors with a propensity for data analytics who coach their teammates in applying of data analytics on each engagement.





Others have centralized all analytics into a center of excellence, with a small number of specialists performing all the analytics work. This approach creates bottlenecks and capacity issues. It can be problematic when specialist turnover occurs, as many teams then drop to little or no analytics testing with a specialist's departure. And once they leave, it isn't easy to replace them.





Selecting the right tool

TeamMate Audit Benchmark reported that 14 percent of participants lack the tools to conduct a data analytics program.

Seventy-three percent of teams use Excel for analytics, and 22 percent use ONLY Excel. We know that Excel is very popular, but it is also difficult to use for more advanced analytics without advanced Excel skills. This is where a tool like TeamMate Analytics comes in.

Just over half of the respondents use two or more tools in combination. This enables individuals to use the tool that best fits their capabilities and what they are trying to accomplish.

Tools that don't require any scripting make up 66 percent of the tools used.

Business intelligence tools, like Power BI and Tableau, have quickly become as well adopted as more traditional data analytics tools.

What tool(s) does your team use for analytics?

73%

Excel

33%

ACL

22%

Power BI

21%

TeamMate Analytics

17%

IDEA

16%

Tableau

11%

R/Python

9%

QlikView

5%

SAS

8% Other

Identify the need

Finally, for the small proportion of respondents who do not believe that data analytics need to be used on every audit—22 percent felt they didn't need them yet.

To counter that belief, it is important to prove the value of data analytics by targeting low hanging fruit. This is relatively straightforward to implement but will deliver significant gains in the short term.

- Recurring tests (annual or more frequent), such as travel and entertainment, procurement, accounts payable and accounts receivable
- Controls/functions that need to be monitored because of their significance to the business and business operations
- Large volumes of transactions/control instances where a control weakness or breakdown is material
- Data is readily available to internal audit for analysis

Changing your internal audit game is the only option

With more than 50% of global internal audit teams already embarking upon change to be quicker, more adaptive and responsive to the larger change happening in their own organizations, it is imperative that every internal audit team find a way to evolve their practices and methodology.

The big game changers of dynamic risk assessment, agile audit and integrated analytics are where most teams are focusing their attention. Remember, small changes in one area may result in changes in the other two as they are natural extensions of each other. Be a part of the evolution to trail blazers!

Dynamic risk assessment

Agile audit

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