



# THE NEXT-GENERATION INTERNAL AUDIT JOURNEY NEEDS TO BEGIN NOW

*Assessing the Results of Protiviti's  
2021 Next-Generation Internal Audit Survey  
for the Middle East Region*

protiviti®  
Face the Future with Confidence

## Executive Summary — Every Journey Begins With the First Step

A global pandemic caused by a rare airborne virus that continues to affect organizations in different ways around the world ... a growing number of stakeholders in organizations with whom internal audit needs to partner ... digital transformation and innovation initiatives occurring enterprise wide and in individual departments and functions ... business models and a risk landscape with seemingly shorter cycle times than in years past.

The case can be made that chief audit executives (CAEs) and their teams have more challenges and demands today than at any time in recent memory, as well as opportunities to engage and support the business in new, innovative ways. These developments underscore the need for internal audit functions to adopt next generation internal audit practises to be more agile and technology-enabled, to have the required skillsets in alignment with these practises, and to achieve a real time level of engagement with risk management, data and controls. But for most internal audit groups, their next-generation audit journey is just beginning. In fact, the results from Protiviti's 2021 Next-Generation Internal Audit Survey reveal relatively low maturity levels in different areas of Governance, Methodology and Enabling Technology. But what perhaps is most telling is the skill and capability levels of organizations

and internal audit functions that we classify as "Digital Leaders." These organizations are reaping the significant benefits of next-generation internal audit practises given their substantially higher reported levels of maturity in these areas.

The journey toward becoming a next-generation internal audit function is neither easy nor quick, but it is highly worthwhile. We can see that relatively few are "walking the talk" when it comes to advancing into next-generation governance structures, delivery methods and technologies. Moreover, as we detail in the section, "Roadmap – Getting Started and Advancing on Your Next-Gen Audit Journey," the trek need not involve major initiatives every time, but rather single or small steps to get started.

COVID-19 laid bare the urgent need for internal audit groups to adopt technologies and upskill in order to be a more of a strategic partner and advisor to their C-suites, boards and audit committees. This warrants IA functions to add talent with technology skills along with the traditional accounting and auditing skills. Considering the pace of transformation being adopted in the business, IA leadership will have to formalize and fast track their innovation and transformation agenda. We see that most internal audit groups are just getting started on their next-gen journeys. This is good – the key is to be on the journey and continue moving forward. Otherwise, internal audit functions could be left behind.

SANJAY RAJAGOPALAN

Managing Director, Protiviti Member Firm for the Middle East Region



## Key Takeaways From Our Survey

**Progress remains slow: Next-generation internal audit journeys are just beginning** — For CAEs and internal audit leaders as well as other internal audit professionals, self-reported maturity levels are primarily in the midrange, with lower scores related to adoption and use of enabling technologies. After a challenging 2020 that required many internal audit functions to re-prioritise projects, it's now time to refocus efforts on embracing the next generation of internal auditing as the new normal.

**Digital Leaders stand out** — With regard to next-generation internal audit capabilities, there is a clear difference in the skill and maturity levels between Digital Leaders and other organizations.

**Digital maturity remains a rarity, but progress is evident** — Most internal audit functions are just getting started on their next-generation journey: A clear majority rank both their organization and internal audit department below the Digital Leader level. Yet a majority have transformation and innovation initiatives underway, which is a positive development.

## About Our Survey

*Protiviti conducted its global 2021 Next-Generation Internal Audit Survey. Participants primarily included CAEs and internal audit leaders and professionals. Please see the Methodology and Demographics section for further details on the survey and our respondents.*

## Protiviti's Digital Maturity Scale

Respondents were asked to rate the digital maturity of their organization and internal audit department on a 10-point scale (see below). The questions were prefaced with a detailed definition of digital transformation and maturity:

*Digital transformation is about changing the way an organization acts and thinks in everything it does to position it to compete with “born digital” companies and Digital Leaders, including through increased use of data and technology to support enhanced customer engagement, digitization of products and services, better informed decision making, and improved operational performance. We define the levels of digital maturity as follows:*

- **Digital Sceptic:** Digital plans are not formalized and initiatives are managed in an ad hoc or reactive manner. React to competition. Risk averse.
- **Digital Beginner:** Digital plans are not fully developed, although multiple digital initiatives are underway and the objectives of these initiatives are understood. Embracing change. Collection of point solutions.
- **Digital Follower:** A digital strategy has been developed and the organization has a proven track record of delivering on digital initiatives. Digital initiatives are typically focused on discrete aspects of the customer journey. Clear strategy. Agile. Effective at change delivery.
- **Digital Expert:** Digital aspects are in place and managed quantitatively enterprise wide. High levels of process automation have been achieved. The organization has a proven track record adopting emerging technologies. Low-cost base. Hyper scalable.
- **Digital Top Performer:** The organization has a proven track record of disrupting traditional business models. Digital aspects of strategic plans are continually improved based on lessons learned and predictive indicators. Innovative. Disruptive.

### Digital Maturity Scale

1 – Digital Sceptic	6 – Digital Follower +
2 – Digital Sceptic +	7 – Digital Expert -
3 – Digital Beginner	8 – Digital Expert
4 – Digital Beginner +	9 – Digital Expert +
5 – Digital Follower	10 – Digital Top Performer

For the purpose of our analysis, we have categorized our group of “Digital Leaders” to include those organizations and internal audit departments that rank themselves at “7” or higher.

# Digital Maturity Rankings

## How Organizations and the Internal Audit functions rank on the Digital Maturity Scale

Digital Maturity	Middle East		All respondents	
	Organization	IA functions	Organization	IA functions
10 - Digital Top Performer	3%	2%	3%	2%
9 - Digital Expert +	4%	3%	4%	3%
8 - Digital Expert	7%	3%	6%	4%
7 - Digital Expert -	7%	2%	7%	5%
6 - Digital Follower +	18%	15%	20%	18%
5 - Digital Follower	19%	16%	20%	18%
4 - Digital Beginner +	19%	29%	19%	20%
3 - Digital Beginner	17%	10%	16%	20%
2 - Digital Skeptic +	2%	8%	3%	4%
1 - Digital Skeptic	4%	12%	2%	6%

# Assessing Next-Generation Internal Audit Maturity Levels

TABLE 1

Level of Maturity: Next-Generation Internal Audit Capabilities – Overall Results\*

	Middle East	All respondents	Global IA Digital leaders
<b>Governance</b>			
Organizational Structure	5.2	5.4	7.3
Internal Audit Strategic Vision	4.8	5.4	7.0
Aligned Assurance	4.2	5.3	6.8
Resource & Talent Management	4.5	5.2	6.9
<b>Methodology</b>			
High-Impact Reporting	5.1	5.5	7.4
Dynamic Risk Assessment	3.6	4.8	6.6
Continuous Monitoring	4.8	4.8	6.8
Agile Audit Approach	3.8	4.5	6.8
<b>Enabling Technology</b>			
Advanced Analytics	3.9	4.2	6.9
Automation	3.5	4.0	6.6
Process Mining	3.1	3.6	6.2
Machine Learning (ML) and Artificial Intelligence (AI)	2.0	3.1	5.4

\* For each next-generation internal audit capability, the score represents the average response based on a 10-point scale, where “1” indicates a low level of maturity and “10” indicates a high level of maturity.

## What You Need to Know

- Adoption of digital transformation is rising at a rapid pace in Middle East. As per the survey results, 21% of the organizations are categorized as Digital Leaders as against 20% globally. One of the key reasons for this pace is the impetus from the governments across the region towards adopting emerging technologies to drive business efficiency and enhance customer experience.
- Though businesses at an overall level are doing well on their digital maturity curve, there is a need for internal audit functions to accelerate their digital transformation journey. The survey shows that currently, only 10% of the respondents in the region identified their internal audit departments as 'digital leaders' as against 14% of global respondents.
- Key areas of focus for next generation internal audit functions include aligned assurance, an agile audit approach, technology and data. For all these areas, the internal audit department needs to have the right mindset, skills and tools. These are also the areas where internal audit functions in Digital Leader organizations have already made significant advancement.
- Overall, maturity levels for next-generation internal audit competencies are in the mid to low end of the spectrum, indicating most organizations are still in the early stages of their next- generation audit journey. This is not necessarily a red flag, at least for the moment, as the CAEs and internal audit departments view themselves on course in their journey and have a plan in place. As per the survey, 73% of the organization plan to undertake digital transformation over the next two years. Further the results from earlier Protiviti surveys on these topics also indicate that internal audit leaders and their teams are keen to improve their skills and capabilities across next-generation components.
- Governance and Methodology maturity level are higher than those of the enabling technology. Governance covers the internal audit function's strategy, structure and skills, including how those skills are developed and sourced, whereas methodology is designed to equip organizations with increasingly precise insights into real-time risks. The Enabling Technology maturity score being the lowest is not a surprise, considering that capabilities such as machine learning, AI and process mining remain relatively new and the internal audit team lack relevant skillsets.

# Overview of Internal Audit Transformation and Innovation Initiatives

Has your internal audit department completed or is your internal audit department currently undertaking any transformation or innovation initiatives?

	Middle East	All respondents	Global IA Digital leaders
Yes	56%	61%	70%
No	39%	33%	19%
Unsure	5%	6%	11%

Does your internal audit department have plans to undertake any transformation or innovation activities? \*

	Middle East	All respondents	Global IA Digital leaders
Yes, we plan to do so within the next year	20%	10%	11%
Yes, we plan to do so within the next two years	53%	41%	45%
No, we have no plans to implement transformation or innovation activities	27%	49%	44%

## What You Need to Know

- A majority of internal audit departments are currently undertaking transformation or innovation initiatives, or plan to do so within next two years. In addition, reported levels of return on investment are high and for most the focus on these initiatives has increased over the past year. This demonstrates that internal audit functions have realized that they need to adopt transformation and innovation activities, which will enable them to add value to business.
- There are a quite a few positive findings in these survey results, indicating that innovation and transformation are important priorities for internal audit groups, regardless of their specific progress with them.

\*Among organizations that are not currently undertaking any transformation or innovation initiatives.

Which one of the following statements best defines the current maturity of your internal audit transformation or innovation activities? \*

	Middle East	All respondents	Global IA Digital leaders
There is no formal innovation agenda with internal audit and no programs in place to otherwise drive or encourage innovative thinking and pursuits	23%	7%	4%
Even if an innovation agenda does not exist, ideas are encouraged and often evaluated and explored	13%	32%	17%
While no formal innovation structure exists, the internal audit function has run innovation challenges to generate ideas and pursue proposed solutions	18%	20%	11%
The entire internal audit function understands the importance of innovation and innovation contributions are measured as part of performance appraisals	23%	28%	35%
Innovation is defined as a core value for the internal audit function, with an appreciation and focus on continuous reinvention to long-term success	23%	13%	33%

\* Among organizations that are currently undertaking transformation or innovation initiatives.

Do you have designated “innovation/transformation champions” (or equivalent structure, specifically focused on innovation/transformation) within your audit department?

	Middle East	All respondents	Global IA Digital leaders
Yes	30%	29%	47%
No	63%	62%	36%
Unsure	7%	9%	17%

Compared to one year ago, how has your internal audit department’s focus on innovation/transformation initiatives changed?

	Middle East	All respondents	Global IA Digital leaders
Increased significantly (5)	17%	16%	28%
Increased somewhat (4)	50%	50%	35%
No change (3)	33%	31%	37%
Decreased somewhat (2)	0%	3%	0%
Decreased significantly (1)	0%	0%	0%

**How would you rate the return on investment (ROI) of innovation and transformation activities within your internal audit organization?**

	Middle East	All respondents	Global IA Digital leaders
High level of ROI	9%	15%	33%
Medium level of ROI	32%	40%	49%
Low level of ROI	36%	17%	3%
No ROI	9%	9%	2%
Don't know	14%	19%	13%

**How do you believe your internal audit department compares with others in your industry regarding your overall level of employing innovation/transformation? \*\***

	Middle East		All respondents		Global IA Digital leaders	
	Today	In 2 years	Today	In 2 years	Today	In 2 years
Far ahead of most competitors	4%	12%	4%	11%	14%	33%
Moderately ahead of most competitors	11%	25%	20%	29%	41%	38%
About the same as most competitors	45%	43%	38%	33%	25%	16%
Moderately behind most competitors	23%	5%	23%	16%	10%	4%
Far behind most competitors	17%	5%	11%	5%	0%	0%

\*Among organizations that are currently undertaking any transformation or innovation initiatives.

\*\*Not shown: 'Don't know' responses

## What You Need to Know

- One of the key differentiators between the Digital Internal Audit leaders and other Internal Audit functions is the implementation of formal innovation and transformation program, focus on innovation, and a designated champion to drive it.
- 82% of the respondents in the Digital Internal Audit leader category believe that they were able to generate medium to high level of returns on investment and against 41% in Middle East. Key reason for such high return on investment can be attributed towards formalizing the innovation and transformation agenda.

# Audit Committee Engagement

How much interest has the audit committee shown in internal audit's plans to undertake transformation or innovation activities?

	Middle East	All respondents	Global IA Digital leaders
High level of interest from the audit committee	19%	20%	44%
Medium level of interest from the audit committee	39%	41%	29%
No interest/low level of interest from the audit committee	39%	25%	7%
Don't know	3%	14%	20%

How much information do you share with the audit committee about internal audit's plans to undertake transformation or innovation activities?

	Middle East	All respondents	Global IA Digital leaders
High level of information shared with the audit committee	17%	19%	37%
Medium level of information shared with the audit committee	43%	43%	38%
No information/low level of information shared with the audit committee	27%	26%	7%
Don't know	13%	12%	18%

## What You Need to Know

- 58% of Audit Committees in the Middle East have shown medium to high level of interest in understanding the transformation and innovation activities undertaken by the internal audit functions.
- There is a high likelihood that an update on innovation and transformation initiatives will become a permanent agenda item.
- These can be one of the key accelerators towards adoption of the Next Gen IA initiatives as the Audit Committees question the pace of adoption.

# Impact of COVID-19

Did the COVID-19 pandemic cause your organization's internal audit department to rethink what it was focused on?

	Middle East	All respondents
Yes	85%	71%
No	10%	23%
Unsure	5%	6%

Overall, how would you rate the level of impact the COVID-19 pandemic has had on your internal audit organization's ability to continue executing audits? \*

	Middle East	All respondents	Global IA Digital leaders
High impact	25%	20%	7%
Moderate impact	50%	40%	56%
Little / no impact	25%	40%	37%

\* Respondent provided answers based on a 1 to 5 scale, where "1" represents no impact and "5" represents significant impact.

Overall, how would you rate the level of impact the COVID-19 pandemic had on your 2020 internal audit plan? \*

	Middle East	All respondents	Global IA Digital leaders
High impact	20%	26%	17%
Moderate impact	45%	42%	39%
Little / no impact	35%	32%	44%

\* Respondent provided answers based on a 1 to 5 scale, where "1" represents no impact and "5" represents significant impact.

How, if at all, has your level of concern for data security and privacy issues changed as your organization's people, processes and technologies have shifted to a remote working model relying on your organization's existing security?

	Middle East	All respondents	Global IA Digital leaders
High increase	35%	26%	35%
Moderate increase	55%	47%	48%
Little/no increase	10%	27%	17%

\* Respondent provided answers based on a 1 to 5 scale, where "1" represents no impact and "5" represents significant impact.

How likely or unlikely is it that your organization's risk assessment/risk response programs will change?

	Middle East	All respondents	Global IA Digital leaders
Likely	55%	46%	51%
Neutral	45%	42%	41%
Unlikely	0%	12%	8%

\* Respondent provided answers based on a 1 to 5 scale, where "1" represents very unlikely and "5" represents very likely.

## What You Need to Know

- While the COVID-19 global pandemic has had a predictable effect on the internal audit departments as they shifted to remote working models for audit execution. Digital Leaders were better prepared to respond to the changing business conditions.
- 75% of the respondents in Middle East were of the view that though the impact of COVID-19 on audit execution was high, teams were able to execute audits remotely. In spite of remote working being effective, the respondents in Middle East believe that the likelihood of internal audit and teams working remotely is only 30%, whereas 68% of all the global respondents believe that there is high likelihood of remote working.
- Amongst all the organizations, there has been a notable increase in the level of concern for data security and privacy issues as a result of people, process and technologies shifting to remote working models.

# Roadmap — Getting Started and Advancing on Your Next-Gen Audit Journey

## It Starts with Commitment, Culture and an Agile Mindset

In our white paper, [The Next Generation of Internal Auditing — Are You Ready?](#), we provide a call to action and roadmap for internal audit organizations to begin their next-generation transformation journey. This guidance remains highly relevant and links closely to the results of this survey on next-generation internal audit principles and practices. As such, we are pleased to republish our recommendations here.

First, we are optimistic about the future of internal auditing. Every internal audit organization has an opportunity to become better and either begin or advance their next-generation internal audit journey. There are small, achievable steps to take that will make notable differences, even if the organization is not a Digital Leader.

To get started on the journey to become a next-generation internal audit function, a clear roadmap is needed. But the very first step, in our view, is establishing the mindset and commitment to:

- Transform the internal audit group's governance, methodologies and enabling technology capabilities needed to address emerging business risks and heightened stakeholder expectations.
- Increase internal audit's effectiveness and efficiency while fulfilling the function's core mission to protect organizational value.
- Start thinking differently.
- Reassess the design and capabilities of internal audit, striving to become an agile next-generation internal audit function that embraces the benefits of the latest in thinking, methods and technologies and is transformation-oriented.

We believe internal audit groups need to be ready and need to get started now. And they need the right

commitment and mindset. While this transformation is mission-critical, it won't be easy.

Internal audit groups should approach this objective in an agile manner. Identify areas where change is needed, establish goals and a plan to accomplish them, and stay focused and intentional in executing against them. Progress doesn't necessarily have to be achieved through modest increments. Each organization will need to figure out the right areas of focus and establish a plan and timeline, understanding that they may end up delivering in a traditional way or through a more agile approach.

Above all, be flexible and maintain a mindset of, "How can internal audit find ways to perform better?" with the perspective that "better" can mean different things to different organizations. Look to take small steps, but commit to taking those steps quickly and immediately. The sequential "assess-design- implement-reassess" approach has become dated. Adopt a more iterative approach, remain flexible, and be prepared to make changes as the business evolves, new priorities are established, and new and innovative approaches emerge.

While the specific design of next-generation governance, methodology and enabling technology elements varies according to an organization's unique risk environment and business objectives, there are common considerations and actions that have proven valuable in the growing number of internal audit transformation efforts underway.

First, CAEs and their teams need to recognize that, while necessary, change and progress are hard. For example, CAEs, as well as the team responsible for designing the next-generation function, need to appreciate the difficulty of the endeavor. In most cases, developing a next-generation internal audit function requires changes to every major component of the

function — from processes, to enabling technologies, to the skills and resources within the function, to how the function is structured and managed. What’s more, an individual organization’s vision for next-generation internal audit will change over time as new business objectives, risks and technologies materialize once the new function begins to take form. For this reason, an effective next-generation audit function must be adaptable — that is, flexible enough to respond to disruptions that are unforeseen today. Engagement with executive stakeholders is also vital in order to solicit input on and support for these changes.

Adaptability is among several key success factors CAEs and innovation teams should consider as they move forward. The others include the following actions:

- **Establish an agile mindset:** To succeed, next-generation efforts require an internal audit culture that embraces change and the need to be agile. Instilling this mindset throughout the function calls for a clear message from the CAE that continued long-term success requires change. This enabler is not unique to internal audit groups, but it represents a formidable hurdle for many of them to overcome.
- **Keep the big picture in mind:** Remember that the purpose of this transformation effort is to fundamentally change and seek to continually improve how all internal audit work is performed. It is incumbent on the leader of the innovation effort to focus on the long term while continuing to deliver in the short term. This helps ensure that the focus on incremental improvements does not result in the implementation of point solutions that may detract from making progress toward the larger goal, which will bring about much larger benefits.
- **Empower people to innovate:** Regardless of whether the internal audit function is 1,000 strong or a team of five, the CAE must encourage and empower

every member of the internal audit group to pursue innovations and work with the team to implement them. Encourage the team not only to adopt a mindset of innovation, but also to submit ideas for improvements and innovations. In addition, be sure to reward experimentation. The key is to drive innovation throughout the internal audit function — innovation should not be a top-down exercise.

- **Seek quick wins:** While the internal audit innovation team should keep the big picture in mind (in other words, becoming a next-generation internal audit function), it is helpful to start the implementation of the plan with a single project that is carefully selected for its high potential to demonstrate visible success — in other words, generate a quick “win” rather than take on too much at once. For example, as the function begins to implement agile auditing, it makes sense to do so in a part of the business already familiar with agile methodologies (e.g., software development within IT), in an area of the business where internal audit has a good relationship, or with a simple, familiar, non-complex and non-integrated audit. On the other hand, launching the implementation effort by introducing new technologies and/or methodologies to a complex auditing area can bog down the effort at a point where it is crucial to demonstrate success and progress.
- **Recognize and react to two sets of ripple effects:** As internal audit teams innovate and implement changes to auditing processes, they must recognize two aftereffects. First, any change to one phase of the auditing lifecycle is likely to affect other phases. For example, changes to how a particular audit is executed may alter the volume and nature of information the audit work produces, which may create the need for essential changes to how the audit work is reported. Second, changes in

internal audit processes and technologies may require changes to the internal audit function's organizational structure and talent. At the same time, changes in talent and skillsets may compel internal audit leaders to think differently about how they leverage them most effectively. A key to addressing these aftereffects is active and open dialogue with internal and external stakeholders.

- **Integrate adaptability into the design:** Given the current pace and magnitude of change, the notion of defining how the internal audit function should look and operate can be an intimidating proposition. Clearly, it is impossible to anticipate: (1) every change that will materialize in the near and long term; and (2) how those shifts will affect auditing operations and skills required within the internal audit function. For this reason, it is useful to develop an adaptable internal audit function, one that is committed to ongoing skills development;

routinely experiments with new technologies and approaches; and can, relatively easily, incorporate new technologies, risk management techniques, and other business processes as they emerge and as the broader organization evolves as part of its own transformation efforts and in response to rapidly changing external forces. This is where a culture of innovation, embedded in the audit function and among all team members, becomes so important. Every team member can have good ideas and should be encouraged and empowered to develop and share them.

# Appendix – Protiviti’s Vision of the Next Generation of Internal Auditing

The objectives of next-generation internal audit functions may be straightforward, but achieving these objectives requires a range of innovative approaches, tools and governance enablers, including a culture of innovation, that must be tailored to specific organizations and their needs.

In our view, there are four essential objectives of next-generation internal audit groups:

- 1. Improve assurance by increasing the focus on key risks** — By evolving to become more data-enabled, next-generation internal audit provides internal and external stakeholders with relevant, timely and impactful results on the effectiveness of risk management and controls.
- 2. Make internal audit more efficient** — Next-generation internal audit drives toward data- and technology-enabled audit processes, delivering increased efficiency and risk assurance.

- 3. Enhance skillsets continually** — Next-generation internal audit functions seek to continually advance their skills, both through upskilling staff and recruiting for new skillsets and capabilities.
- 4. Provide deeper and more valuable insights from internal audit’s activities and processes** — Next-generation internal audit helps organizations make better decisions not only by addressing and managing current risks, but also by illuminating the risks and unforeseen consequences inherent in their longer-term digital transformation and growth strategies.

The specific governance structures, methodologies and enabling technologies that next-generation internal audit groups introduce vary. However, nearly all of the transformations Protiviti has supported or seen have addressed most, if not all, of the competencies, qualities and components in three broad categories illustrated below. Each of these is summarised on the following pages.



## Governance

- **Internal Audit Strategic Vision** — Next-generation internal audit organizations should seek to define a clear and concise strategy to establish the function's purpose, enable achievement of objectives within the established vision and mission, and facilitate a culture of innovation that helps achieve the function's strategy and ensure future relevance.
- **Organizational Structure** — A traditional internal audit hierarchy begets a traditional approach. As new methodologies are embraced, the organizational structure to support those will begin to look very different. The structure must be developed to allow for sufficient and flexible coverage across legal entities, geographies in which the organization operates and risks facing the organization. Reporting lines and roles and responsibilities of both audit and support teams will be redrawn. The composition, size and locations of the audit and support teams will also look very different. Flexible resource models will be employed to gain access to skillsets and capacity as needed.
- **Resource & Talent Management** — In today's corporate climate, a resilient workforce will prove vital to a company's ability to pivot in the face of changing market realities. The workforce of the future needs to be reimagined for increased flexibility and be able to respond to rapid changes in business. Next-generation internal audit groups need to ensure that robust resource management strategy and processes are in place to acquire, manage, retain and enhance the resources, skillsets and capabilities that will enable the internal audit function to achieve both core assurance and transformational goals and objectives.

- **Aligned Assurance** — Aligned enterprise assurance is a correlation of risk, controls and a broader view of the control environment across the three lines of defense and by and between the organization's assurance functions. It seeks to maximize operating efficiency and provides clearer visibility of results to stakeholders. This approach facilitates governance and management of risk within an organization's risk appetite and aims at optimizing the coverage of assurance obtained from management, internal assurance providers and external assurance providers on the risk areas affecting the organization.

## Methodology

- **Dynamic Risk Assessment** — Internal audit functions that desire to enhance and transform their organization should continually seek to adapt their risk assessment approach to more effectively quantify risk in a rapidly evolving business environment and execute relevant assurance work to align with key organizational risks and priorities. • A dynamic risk assessment approach is designed to be increasingly data-driven and adaptive to emerging risks and proactively measure key existing risks, enabling organizations to identify changing risk trends in real time, quantitatively measure and prioritize risk, and drive the most effective use of assurance coverage.
- **Agile Audit Approach** — An agile audit approach utilizes a framework that is based on iterative and sustainable development, where requirements and solutions evolve through collaboration between cross-functional audit teams focused on quality. • Internal audit and its stakeholders are focused on a common goal of risk mitigation through responding to changing and emerging business needs and directions while simultaneously working to meet business and regulatory commitments.

- **High-Impact Reporting** — Internal audit demonstrates its value by communicating effectively and, in the process, utilizing simplified and high-impact reporting. This is the culmination of all internal audit's activities leading to the right type of communication tailored to each audience to achieve maximum impact. Communications should occur in a variety of forms to stakeholders with different needs and expectations, including audit reports, risk assessments, audit committee presentations and reports to regulators. Next-generation internal audit functions communicate what stakeholders need to know and allow them to drill down to the details as needed.
- **Continuous Monitoring** — Next-generation internal audit organizations should seek to adopt a robust continuous monitoring program to optimize the efficiency and effectiveness of their audit operations and facilitate deployment of audit resources to more strategic efforts. Organizations should work to create a technology roadmap that includes the necessary data and functionality to facilitate a continuous monitoring program. Internal audit organizations also should consider the potential for continuous monitoring in the context of their broader assurance strategy.
- **Automation** — As the popularity of automation increases, including but not limited to robotic process automation (RPA), internal audit departments should be asking about their organization's current strategy and plans and evaluating whether there are any processes or tasks that lend themselves to automation. This can increase the effectiveness and efficiency of audit work by improving audit quality/coverage as well as by automating routine audit tasks, which, in turn, frees up time for more value-adding work.
- **Machine Learning and Artificial Intelligence** — Organizations are rapidly looking to turn their data into value-added products and services through machine learning techniques. Internal audit departments need to be familiar with this field of study, the risks and opportunities it presents, and how it can be applied. AI and machine learning represent great examples of techniques with the potential to deliver significant value through the internal audit lifecycle (risk assessment and planning, scoping, discovery, fieldwork, reporting, follow-up and monitoring) and change the way we use data to complete audit activities.
- **Process Mining** — Internal auditors should seek out new technologies that will help add value to their organizations beyond traditional audit methods. Enabling technologies such as process mining allow auditors to easily analyze large quantities of data, visually re-create processes from data, explore deviations and identify root causes to previously unknown issues. Process mining also allows for more dynamic and meaningful reporting.

## Enabling Technology

- **Advanced Analytics** — Internal audit organizations should challenge their current state of analytics capabilities and commit to making better use of data. Raise awareness, develop skills, explore new tools, establish a plan and drive incrementally increased use.

# Methodology

Protiviti conducted its global 2021 Next-Generation Internal Audit Survey. More than 870 internal audit leaders and professionals (n = 874) completed the survey questionnaire, including 336 who reported as a CAE or Director of Audit.

The survey consisted of a series of questions exploring the overall digital maturity of organizations and internal audit departments, as well as questions to identify the level of maturity in the components under three categories:

- Governance
- Methodology
- Enabling Technology

We also asked a series of questions related to the effects of the COVID-19 global pandemic.

In addition, survey participants were asked to provide demographic information about the nature, size and location of their businesses, and their titles or positions within the internal audit department. These details were used to help determine whether there were distinct capabilities and needs among different sizes and sectors of business or among individuals with different levels of seniority within the internal audit profession. All demographic information was provided voluntarily by respondents.

## Demographics of Respondents from Middle East

### Position

Chief Audit Executive (CAE)	35%
Audit Manager	31%
Audit Director	6%
Audit Staff	4%
IT Audit Manager	6%
Management Consultant	6%
Other	12%

## Industry

Financial Services – Banking	9%
Manufacturing (other than Technology)	8%
Insurance (other than Healthcare Payer)	4%
Financial Services – Asset Management	4%
Government/Education	8%
Healthcare Provider	4%
Retail	2%
Power and Utilities	6%
Hospitality, Leisure and Travel	4%

Oil and Gas	12%
Construction	4%
Not-for-Profit	4%
Real Estate	8%
Airlines	2%
Private Equity	4%
Transportation and Logistics	8%
Other	9%

## Size of Organization (outside of financial services) – by gross annual revenue in U.S. dollars

\$10 billion or more	19%
\$5 billion - \$9.99 billion	7%
\$1 billion - \$4.99 billion	12%
\$500 million - \$999.99 million	12%
\$100 million - \$499.99 million	19%
\$25 million - \$99.99 million	19%
Less than \$25 million	12%

### Size of Organization (within financial services industry) – by assets under management in U.S. dollars

\$1 billion - \$4.99 billion	43%
\$250 million - \$999.99 million	57%

### Type of Organization

Public	28%
Private	31%
Not-for-Profit	4%
Government	33%
Other	4%

### Owned by Private Equity Firm

Yes	27%
No	69%
Don't know	4%

## ABOUT PROTIVITI

Protiviti ([www.protiviti.com](http://www.protiviti.com)) is a global consulting firm that delivers deep expertise, objective insights, a tailored approach and unparalleled collaboration to help leaders confidently face the future. Protiviti and our independent and locally owned Member Firms provide clients with consulting and managed solutions in finance, technology, operations, data, analytics, governance, risk and internal audit through our network of more than 85 offices in over 25 countries.

Named to the *2021 Fortune 100 Best Companies to Work For*<sup>®</sup> list, Protiviti has served more than 60% of *Fortune* 1000 and 35% of *Fortune* Global 500 companies. The firm also works with smaller, growing companies, including those looking to go public, as well as with government agencies. Protiviti is a wholly owned subsidiary of Robert Half (NYSE: RHI). Founded in 1948, Robert Half is a member of the S&P 500 index.

## OUR OFFICES IN THE MIDDLE EAST REGION

### Abu Dhabi

Al Ghaith Holding Tower, 9th Floor  
Airport Road, P.O. Box: 32468  
Abu Dhabi, United Arab Emirates  
Phone: +971.2658.4640  
Fax: +971.2658.4641  
Email: [abudhabi@protivitiglobal.me](mailto:abudhabi@protivitiglobal.me)

### Bahrain

Platinum Tower, 17th Floor  
Bldg. 190, Rd. 2803, Blk. 428, Seef  
P.O. Box: 10231, Diplomatic Area  
Manama, Kingdom of Bahrain  
Phone: +973.1710.0050  
Fax: +973.1710.0051  
Email: [bahrain@protivitiglobal.me](mailto:bahrain@protivitiglobal.me)

### Dubai

U-Bora Tower 2, 21st Floor  
Office 2104, Business Bay  
P.O. Box: 78475, Dubai  
United Arab Emirates  
Phone: +971.4438.0660  
Fax: +971.4438.0655  
Email: [dubai@protivitiglobal.me](mailto:dubai@protivitiglobal.me)

### Egypt

Cairo Complex  
Ankara Street Bureau 1  
Second Floor, Sheraton Area  
Heliopolis - Cairo, Egypt  
Phone: +202.2586.4560  
Email: [egypt@protivitiglobal.me](mailto:egypt@protivitiglobal.me)

### Kuwait

Al Shaheed Tower, 4th Floor  
Khaled Ben Al-Waleed Street  
Sharq P.O. Box: 1773  
Safat 13018, State of Kuwait  
Phone: +965.2242.6444  
Fax: +965.2240.1555  
Email: [kuwait@protivitiglobal.me](mailto:kuwait@protivitiglobal.me)

### Oman

Al Ufuq Building, 2nd Floor  
Office No. 26, Shatti Al Qurum  
P.O. Box: 1130, PC 112  
Ruwi, Sultanate of Oman  
Phone: +968.2469.9403  
Fax: +968.2469.6356  
Email: [oman@protivitiglobal.me](mailto:oman@protivitiglobal.me)

### Qatar

Palm Tower B, 19th Floor  
West Bay, P.O. Box: 13374  
Doha, Qatar  
Phone: +974.4421.5300  
Fax: +974.4421.5288  
Email: [qatar@protivitiglobal.me](mailto:qatar@protivitiglobal.me)

### Saudi Arabia

Al-Ibdaa Tower, 18th Floor  
Building No. 7906, King Fahad  
Branch Road, Al-Olaya, P.O. Box 3825  
Riyadh 12313, Kingdom of Saudi Arabia  
Phone: +966.11.298.7100  
Fax +966.11.217.0180  
Email: [saudi Arabia@protivitiglobal.me](mailto:saudi Arabia@protivitiglobal.me)

---

This publication has been carefully prepared, but should be seen as general guidance only. You should not act or refrain from acting, based upon the information contained in this presentation, without obtaining specific professional advice. Please contact the persons listed in the publication to discuss these matters in the context of your particular circumstances. Neither Protiviti Inc. or its Member Firms, nor the shareholders, partners, directors, managers, employees or agents of any of them make any representation or warranty, expressed or implied, as to the accuracy, reasonableness or completeness of the information contained in the publication. All such parties and entities expressly disclaim any and all liability for or based on or relating to any information contained herein, or error, or omissions from this publication or any loss incurred as a result of acting on information in this presentation, or for any decision based on it.



## THE AMERICAS

### UNITED STATES

Alexandria  
Atlanta  
Baltimore  
Boston  
Charlotte  
Chicago  
Cincinnati  
Cleveland  
Dallas  
Denver  
Fort Lauderdale

Houston  
Kansas City  
Los Angeles  
Milwaukee  
Minneapolis  
New York  
Orlando  
Philadelphia  
Phoenix  
Pittsburgh  
Portland  
Richmond

Sacramento  
Salt Lake City  
San Francisco  
San Jose  
Seattle  
Stamford  
St. Louis  
Tampa  
Washington, D.C.  
Winchester  
Woodbridge

**ARGENTINA\***  
Buenos Aires

**BRAZIL\***  
Belo Horizonte  
Rio de Janeiro  
Sao Paulo

**CANADA**  
Kitchener-Waterloo  
Toronto

**CHILE\***  
Santiago

**COLOMBIA\***  
Bogota

**MEXICO\***  
Mexico City

**PERU\***  
Lima

**VENEZUELA\***  
Caracas

## EUROPE, MIDDLE EAST & AFRICA

**FRANCE**  
Paris

**GERMANY**  
Berlin  
Dusseldorf  
Frankfurt  
Munich

**ITALY**  
Milan  
Rome  
Turin

**THE NETHERLANDS**  
Amsterdam

**SWITZERLAND**  
Zurich

**UNITED KINGDOM**  
Birmingham  
Bristol  
Leeds  
London  
Manchester  
Milton Keynes  
Swindon

**BAHRAIN\***  
Manama

**KUWAIT\***  
Kuwait City

**OMAN\***  
Muscat

**QATAR\***  
Doha

**SAUDI ARABIA\***  
Riyadh

**UNITED ARAB  
EMIRATES\***  
Abu Dhabi  
Dubai

**EGYPT\***  
Cairo

**SOUTH AFRICA \***  
Durban  
Johannesburg

## ASIA-PACIFIC

**AUSTRALIA**  
Brisbane  
Canberra  
Melbourne  
Sydney

**CHINA**  
Beijing  
Hong Kong  
Shanghai  
Shenzhen

**INDIA\***  
Bengaluru  
Hyderabad  
Kolkata  
Mumbai  
New Delhi

**JAPAN**  
Osaka  
Tokyo

**SINGAPORE**  
Singapore

\*MEMBER FIRM

© 2021 Protiviti Inc. An Equal Opportunity Employer M/F/Disability/Veterans.  
Protiviti is not licensed or registered as a public accounting firm and does not issue  
opinions on financial statements or offer attestation services. PRO-0521-101127

protiviti®