

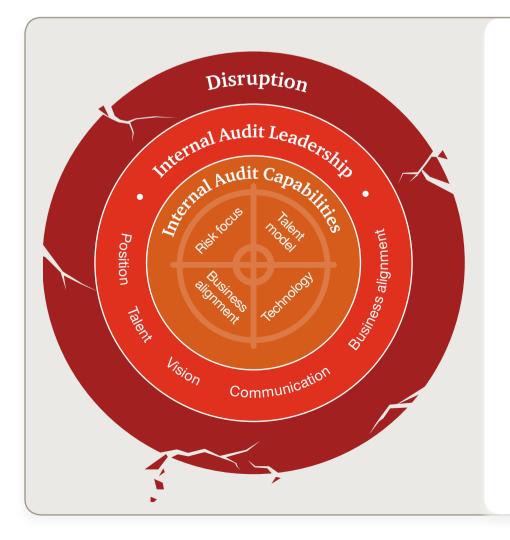
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Preface

In 2015, the State of the Internal Audit Profession Study explored the operational capabilities—specifically, risk focus, business alignment, talent and technology—that move Internal Audit toward True North. Recognizing the relationship between effective internal audit performance and leadership, in 2016 we developed a profile of internal audit leaders who effectively guide their organizations to excel in these attributes.

An internal audit function with strong capabilities and effective leadership can progress a long way toward becoming a highly valued, trusted advisor to stakeholders. Yet even then. Internal Audit has to keep pace with the business and the external forces it faces in an ever-changing landscape of business disruption. Therefore, in this third and final installment in PwC's True North trilogy, we look outside Internal Audit at the influences disrupting organizations to study the role of Internal Audit and how it can maintain or increase its value amidst disruption.

Figure 1: Staying the course toward True North



True North, a lean concept, born decades ago from the Toyota Production System, has evolved to become a set of ideals used to guide an organization from its current state to where it wants to be.

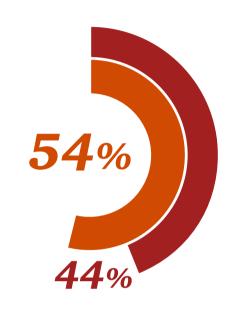
When the environment around us is rapidly evolving, it is easy to lose our way or slow our journey.

True North is a fixed orienteering point—the unchanging vision that helps us stay on track as the world around us changes.

Executive summary

A call to action

Stakeholders reporting Internal Audit contributes significant value



- 2016 stakeholders
- 2017 stakeholders

A silver lining

48% of stakeholders (nearly half) want Internal Audit to be trusted advisors to the business

Not surprisingly, PwC's 13th annual State of the Internal Audit Profession Study confirms that Chief Audit Executives (CAEs) remain firm in their desire to grow their value to their organizations. What is perhaps surprising, however, is that Internal Audit appears to be losing ground in trying to keep pace with stakeholder expectations. Stakeholders reporting that Internal Audit adds significant value dropped from 54% in 2016 to only 44% in 2017, reaching its lowest level in the five years we've been tracking this metric. Adding pressure to the situation is that half of stakeholders who already receive significant value from Internal Audit indicate that they still expect more value than they are currently receiving.

Our study uncovered several factors—including ongoing compliance burdens and pressure to do more with less—that appear to contribute to the decline in perceived internal audit value. The good news is that, despite this, many stakeholders support Internal Audit taking a more value-added role. Internal audit leaders can take advantage of this empowerment and leverage the sponsorship of stakeholders to advance their functions.

Capitalizing on those activities that drive value will be critical to reverse this downward trend in value perception. An important variable in this equation is the disruptive and uncertain environment in which organizations now operate. PwC's 20th CEO Survey shows CEOs are optimistic amidst uncertainty. They have had to cope with stormy conditions, figure out when disruption is happening to them and have a strategy in place for more than one future. Accordingly, this year's study identified that Internal Audit's ability to help stakeholders navigate disruption contributes to a stronger perceived value.

Disruptions are significant, quickly developing, and potentially unplanned or unanticipated events that create risk and potential opportunity, demanding the attention and resources of the business. Disruptions are no longer episodic; in fact, they are constant, ranging from disruptive innovation that creates a new market, to economic volatility, regulatory changes or even a catastrophic event. This fast-changing, unpredictable environment necessitates that businesses anticipate and react to all kinds of change to survive and thrive.

If disruptions are taking Internal Audit off course or Internal Audit is failing to address disruptionrelated risks, the function will likely fall behind as the business charges ahead. However, a subset (18%) of the nearly 1,900 respondents to this year's survey report that their internal audit function plays a valuable role in helping their companies anticipate and respond to business disruption (we call this group of respondents "Agile IA Functions"—see "About the Research").

business: Nearly nine of ten stakeholders with Agile IA Functions report that Internal Audit is adding significant value—that's more than double the percentage of stakeholders with less agile internal audit functions.

Our survey, along with the more than 70 interviews conducted globally for this year's study, found that Agile IA Functions are more frequently involved in a broader range of disruptive events and often act as Trusted of maturity and often progressing against very different stakeholder mandates. But, stakeholder expectations will continue to grow and evolve as their organizations operate in a world of constant disruption, and internal audit functions are losing ground. The incremental changes being made by internal audit leaders are not being implemented quickly enough to keep pace with business change. Internal audit leaders and their stakeholders need to think differently to accomplish

A way forward... Internal Audit must evolve to keep pace!

Prepared + Adaptive = Agile

Agile IA Functions are comprised of respondents from a mix of company sizes, industries, geographies and internal audit department sizes, indicating that internal audit functions do not necessarily need scale to be agile. In addition to rating highly in their contribution to business disruption, Agile IA Functions rate higher in their overall value contribution to the

Advisors to their businesses. We use this paper to explore the disruptive environment and to discuss two key traits that enable Agile IA Functions to effectively lead in disruptive environments—they are *prepared* and *adaptive*.

These traits are not easy to embed into day-to-day operations. Internal audit functions are at various levels

more dramatic transformation. As the companies they serve are facing unprecedented disruption and change, in order to remain relevant and to help the business anticipate and respond quickly to disruptive events, Internal Audit needs to aggressively prepare and adapt. It's time for Internal Audit to disrupt itself. *After all, which internal audit function wants to be left behind?*

What disruptions are companies facing?

CAEs and their stakeholders are well aligned on the forces causing the greatest disruption in their businesses. Small variations by industry are evident, as one would expect (Figure 3). However, overall there were more similarities than differences in the survey responses.

Figure 2: Top five disruptions









58%

New

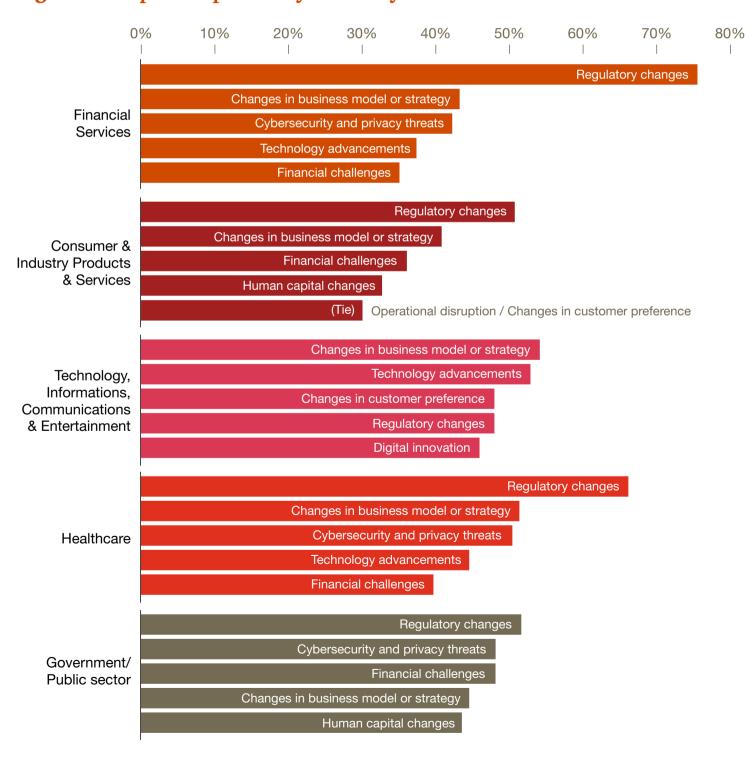
regulation

Changes in business model or strategy

Cybersecurity and privacy threats Financial challenges

Technology advancements

Figure 3: Top disruptions by industry



Determining which disruptions warrant additional attention depends both on how likely they are to occur as well as how significant of an impact they may have. Projecting future probability of occurrence clarifies the evolving risk

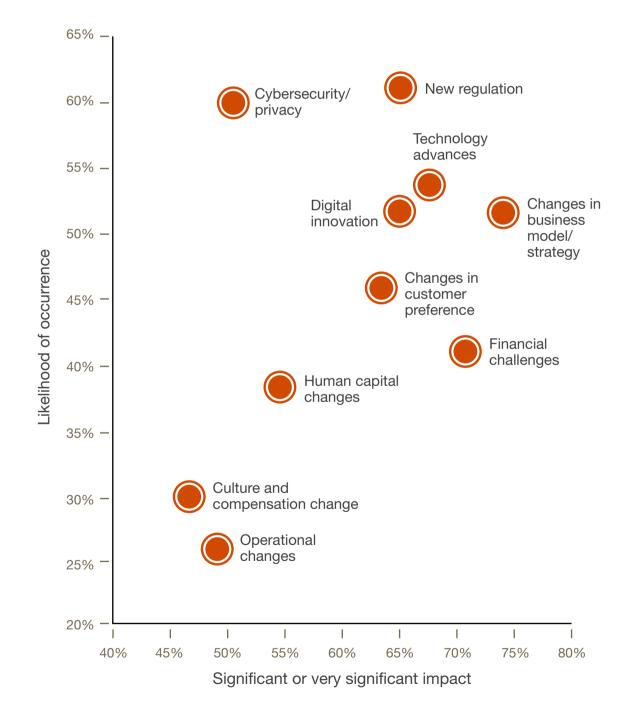
landscape the business is likely to face and may alter investment decisions (Figure 4).

Regulatory changes were the most frequent cause of disruption experienced by organizations in the past two

years and are expected to remain the most universally experienced disruption in the next three years. The vast majority of our interviews highlighted numerous evolving regulations such as anti-corruption, data privacy and security, and industryspecific regulations as sources of future disruption. Despite the prominence of regulatory changes, our survey data tell us that the organizational impact they cause has been perceived to be lower than that of other disruptive forces such as business transformations, financial challenges or technology advances. However, our interviews indicate that in tandem, the likelihood and impact of regulatory changes will remain significant, even if they aren't the most disruptive activities an organization experiences in the coming years.

While cybersecurity and privacy, technology advances and digital innovation are lower on the list of disruptions companies have experienced to date, they jump to be among the most likely disruptions respondents expect to experience in the next three years. The digitization of business will most certainly have many ramifications for organizations in the near horizon.

Figure 4: Future likelihood of disruptive events



Disruption through the lens of the Audit Committee

Despite alignment of opinion on the most impactful disruptions to business organizations, there are significant gaps among CAEs, management and the board on how effectively they believe their organizations handled various disruptors. In fact, the board is much more positive in some areas on the effectiveness of their company's response.

This tells us that board members and management have an opportunity to strengthen communication around these topics to better understand the lens from which each are viewing the day-to-day operational challenges. Does management have better, more transparent information than the board? Does the board have a broader more holistic point of view on how the company is faring compared to others? Both viewpoints may be valid.

"Sometime during the past few years, there was recognition around what internal audit can bring to the game, which is very positive."

—John Baily, Audit Committee Chair, Endurance Specialty Insurance; Board Member, Golub Capital BDC and RLI Corporation



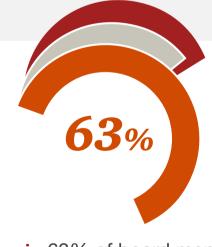
81% of board members believe their organization was effective at responding to new regulations

(vs. 69% of management and 60% of CAEs)



70% of board members believe their organization was effective at addressing changes in business model or strategy

(vs. 50% of management and 48% of CAEs)



63% of board members believe their organization was effective at responding to changes in customer preferences

(vs. 37% of management and 41% of CAEs)



Board members



CAEs

What is Internal Audit's involvement in addressing disruption?

With a wide array of disruptions anticipated over the next three years, now is the time for internal audit functions to take action. Our study provides insight on the differentiated efforts that Agile

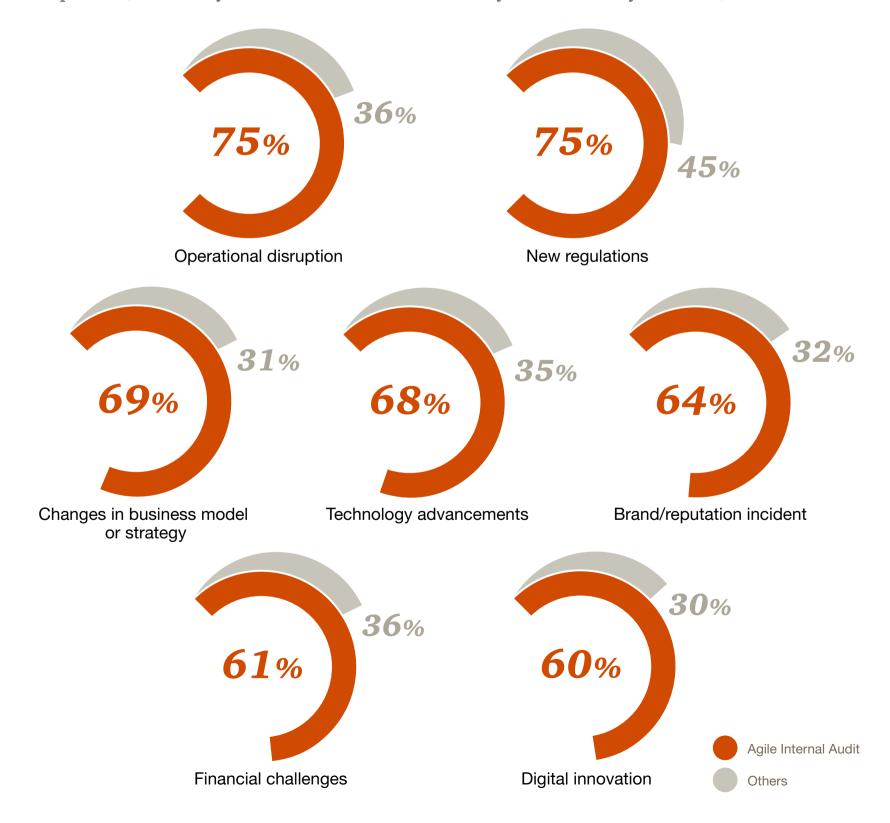
IA Functions are making relative to business disruption that raise their value among stakeholders.

One effort that distinguishes Agile IA Functions is that

this group is relevant across many disruptors, including rapidly emerging risk areas, not just those areas traditionally addressed by internal audit or compliance functions (Figure 5).

Figure 5: Agile Internal Audit Functions are involved in many disruptors

Was Internal Audit involved in helping the company plan for, manage or respond to the disruption? (% who say Internal Audit was extensively or moderately involved)



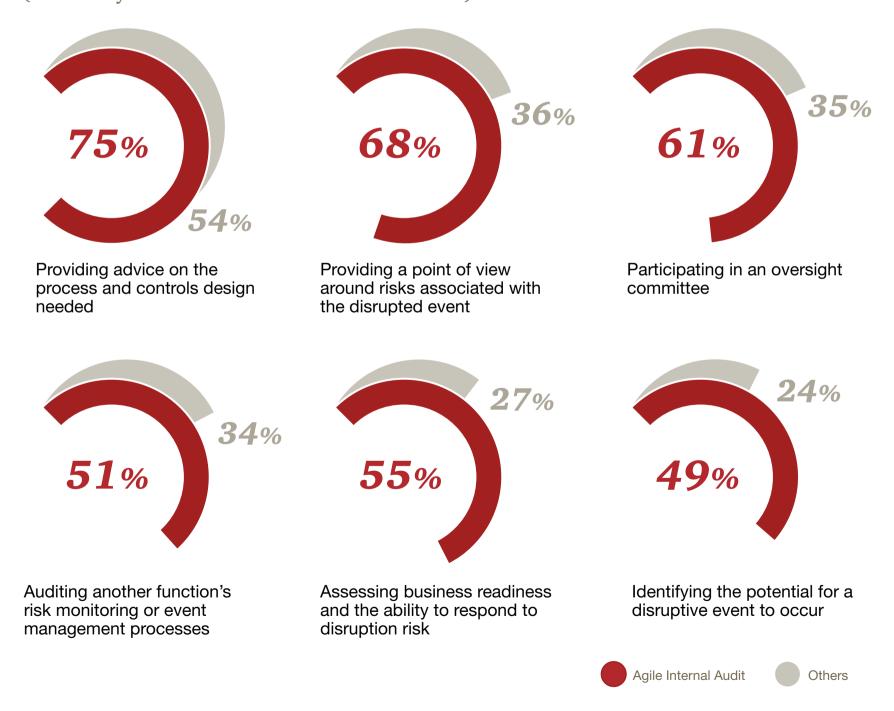
For example, more than twothirds are involved in brand and reputation incidents, technology advancements and changes in the business model. Even more help the company deal with operational disruption and, of course, regulatory changes.

In addition to auditing controls after the fact, Agile IA Functions also do far more to help their companies proactively manage disruption. As disruption occurs, Agile IA Functions help the organization in a multitude of ways (Figure 6). For example,

they more frequently provide a point of view around risks associated with disruptive events, either before they occur—or as they are occurring, not long after the company has responded—and then couple these perspectives with advice

Figure 6: Agile Internal Audit Functions are involved early in the disruption cycle

How is Internal Audit typically involved in helping the business address disruption? (% who say Internal Audit takes this action often)



on the process and controls design needed in response. Nearly half are even involved in identifying the potential for a disruptive event to occur.

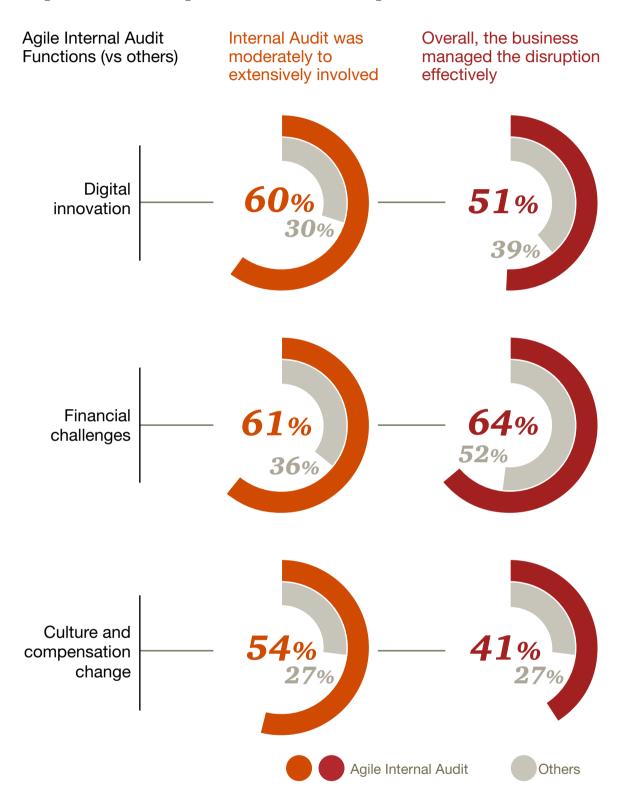
These efforts appear to deliver results. Our study has revealed a correlation between the involvement of Agile IA Functions and overall business performance in response to disruption. This correlation was seen across all disruptions—most significantly in those represented in Figure 7—and indicates that Agile IA Functions are helping the company to better manage risk.

88% of stakeholders with Agile IA Functions report Internal Audit is contributing significant value

Beyond contributing to more effective management of disruption, Agile IA Functions are valued by stakeholders: 88% of stakeholders with Agile IA Functions report that Internal Audit is adding significant value to their organization today compared to 41% of stakeholders with less agile internal audit functions.

Figure 7: Internal Audit involvement correlates with more effective management of disruption

Representative impact on various disruptions



"Change is imminent, so embrace it. Be upfront with management, be their advisor and help with both the what and the how."

—Mark Carawan, Chief Compliance Officer, Citigroup (also served as Chief Auditor, Citigroup from 2011 to 2017)

Case studies

Nasdaq: Continuous assurance of applications built on blockchain technology

Blockchain technology has the potential to revolutionize financial services—and many other industries—and there are clear market signals that its momentum is exploding. In financial services, the global exchange and financial technology company Nasdaq is a leader in the use of blockchain technology. Its blockchain-enabled platform, Nasdaq Linq, is designed to manage the full lifecycle of unlisted securities and is the first of its kind.

Nasdaq Linq is essentially a cloud-based market solution to create liquidity for private equity and it is built on blockchain ledger technology. The challenge with mass adoption of technology this new is alleviating stakeholder concerns that the technology is, in fact, working as designed. Assurance functions—audit, tax, legal, compliance—all need transparency into the technology to verify it is doing what it is supposed to do. But with blockchain technology, traditional backward-looking, sample-based audits are not possible. Every new transaction alters the entire historical record and brings it current. So, auditing has to be done in real-time on a continuous basis.

Working with PwC, Nasdaq is solving this complex issue by building an effective, real-time auditing solution for a blockchain instance. Rather than being intimidated by the technology, Nasdaq and PwC seized the opportunity with creativity, an entrepreneurial spirit and the best capabilities of both firms. Together they are solving the blockchain technology assurance challenge, which is critical to Nasdaq's being able to scale the use of Nasdaq Linq as well as other new blockchain-based market offerings currently under development.

A global company's approach to proactive project assurance

A global company is reinventing itself to combat new digital entrants by making a significant technology investment that is on the forefront of innovation for its industry. When deployed, this transformative technology will cause disruption internally for the company and add to the disruption felt by the broader industry.

Through a co-sourced model, Internal Audit is proactively involved in this important program, providing value-added project assurance ahead of the technology's "go-live." For example, Internal Audit performed an infrastructure review **before** IT began testing, conducted a readiness assessment **prior** to user acceptance testing and reviewed implementation training and change management programs before piloting of the technology. Internal Audit is also involved in security and vendor management related to the program. Executive sponsors recognize and appreciate the value Internal Audit is bringing to such a game-changing program and is empowering them to be an integral part of the process.

What's holding some internal audit functions back?

The clear majority of stake-holders believe Internal Audit's involvement in disruption now is insufficient. Nearly half want Internal Audit more involved in monitoring ongoing risks associated with a disruptive event and in helping the business anticipate disruptions.

So what is preventing more internal audit functions from taking a greater role? We queried the subset of stakeholders and CAEs who indicated that Internal Audit was not consistently involved in responding to disruption, to understand the barriers they face. Amongst this subset, management and board members are aligned on the most significant barriers, but CAEs see challenges differently.

Lack of necessary skills

The barrier cited most often by stakeholders was a lack of necessary skill sets: 55% of stakeholders we asked do not believe that Internal Audit has the subject matter knowledge to address disruption. Thirtyeight percent of CAEs cite either a shortage of subject **68%** of board members and **77%** of management believe Internal Audit's current level of involvement in disruption is not sufficient.

matter experts or shortage of internal audit resources in general as preventing Internal Audit from helping with disruption.

As discussed in each of the last two State of the Profession studies, having the right talent is fundamental to Internal Audit's value contribution. The skills needed by Internal Audit have changed in recent years and are evolving more rapidly now. Skill needs will further accelerate as areas such as technology advancement and digital innovation further disrupt businesses. A flexible talent model is no longer an innovation; it is a requirement. Given the pace of change, Internal Audit cannot expect to source, train and develop talent like it has in the past and still remain relevant in the face of a constantly changing business and risk landscape.

Having the necessary skills may also mean having the right tools and technology for internal audit talent to leverage. Overall, 34% of stakeholders report Internal Audit does not have adequate tools to analyze business disruption or recommend resolution. In contrast, just 3% of stakeholders with Agile IA Functions say a lack of tools is a significant barrier to Internal Audit's participation in disruptive events.

Not a priority investment for Internal Audit

Many respondents cited barriers that in some way correlated to disruption not being perceived as a priority for Internal Audit attention. Yet, the premise that it is not Internal Audit's role to take on a more strategic or consultative position is a clear disconnect with our survey evidence that stakeholders are expecting more from the function.

For example, just over one-third (35%) of stakeholders cite that Internal Audit is not involved with disruptions because they do not provide consulting services. The Institute of Internal Auditors (IIA) Mission of Internal Audit calls on Internal Audit not only to provide "assurance," but also "advice" and "insight." Forty-one percent of stakeholders believe that Internal Audit's involvement in disruption isn't critical because another compliance function is involved. However, our survey

and interviews tell us that Internal Audit has an important role. More than half of Agile IA Functions include auditing the second line of defense in their plan versus only one third of peers. As the third line of defense, Agile IA Functions maintain the responsibility to understand what disruptionrelated risks are being addressed by other functions, aligning their efforts where possible, and helping to identify potential gaps.

From the CAE's perspective, 47% report Internal Audit is not seen by stakeholders as an advisor to the business or that their corporate culture does not support Internal

Audit taking a more strategic role. Our interviews identified several tactics internal audit functions are using to overcome this barrier. For example, one financial services CAE interviewed noted Internal Audit had added the wording "strategic challenge partner" to its charter. This simple step helps set expectations of the internal audit function. Similarly, the CAE of a publishing company is actively rebranding Internal Audit to shift from its focus on compliance and operational risks to strategic and emerging risks. This includes a roadshow by the Vice President of Internal Audit to educate the business on the role Internal Audit can play and how it can help.

From the CAE's perspective...

47% report Internal Audit is not seen by stakeholders as an advisor to the business or that their corporate culture does not support Internal Audit taking a more strategic role.

What will it take for Internal Audit to keep pace?

Certainly internal audit functions are different than just a few years ago. But, they are not changing at the same pace as their companies and in general, have not made the progress they anticipated. In 2013, PwC introduced the designation of "Trusted Advisor" in the context of Internal Audit's maturity model. We defined a Trusted Advisor as an internal audit function that provides value-added services and proactive strategic advice to the business

well beyond the effective and efficient execution of the audit plan. In 2015, stakeholders and CAEs alike told us that within five years, 55% wanted Internal Audit to be considered Trusted Advisors, a sentiment that remains constant today. However, with only 9% of internal audit departments functioning as Trusted Advisors today, as we approach the halfway mark in that five-year journey, it is clear that too little progress has been made (Figure 8).

Figure 8: Progress in the journey toward Trusted Advisor



55% of respondents said they wanted Internal Audit to be a Trusted Advisor by 2020

Just **9%** consider Internal Audit a Trusted Advisor

What do you plan to accomplish in the next two years to achieve that five-year goal?

With negligible movement toward the role of Trusted Advisor and stakeholder perception of overall internal audit value at an all-time low, more dramatic steps are needed. In fact, internal audit functions may need to disrupt themselves to

transform and deliver the value that stakeholders expect. Many Agile IA Functions appear to be doing just that. More than one in every two (56%) Agile IA Functions have radically changed their operating model. This could mean redesigning Internal Audit's entire talent model, revamping internal audit services or audit mix or altering how Internal Audit engages with the business. In these cases, internal audit leaders have fundamentally changed the way they think because they understand that in order

"For disruptive events, management wants a quick response but the deliberate nature of our work slows things down. We are looking to increase the consult vs. risk-based audit mix to give a more timely response. In operations' minds it's a 72-hour turnaround time, and we wouldn't have our work planned in that amount of time."

-Jen Conley, Chief Audit Executive, Intermountain Healthcare

to be relevant to the business today, they had to have adapted yesterday, and in order to remain relevant tomorrow, they need to adapt today. They must move with or ahead of the business, in line with the pace of change.

What would Internal Audit look like if you started with a clean slate?

For emerging growth companies, this is their reality. As they build their internal audit function, it is difficult to

benchmark against peers at long-established companies. Emerging growth companies are in a completely different situation, pioneering products and services that have never existed before and often growing at an exponential rate. In these companies a "blank sheet of paper" approach to internal audit has its advantages. Internal Audit can be positioned as a business partner from the outset instead of being viewed as solely a monitoring function.

How does Internal Audit make meaningful progress toward being agile?

Agile IA Functions are "moving the needle" in increasing their value to the organization by actively participating in how the company plans for, manages and responds to disruption. They are disrupting their own internal audit functions to achieve two essential characteristics: being *prepared* and *adaptive*. We define each characteristic in detail below and offer practical and disruptive recommendations for internal audit leaders and stakeholders to consider to realize more aggressive change faster.

"We could sit on the sidelines and let the company move down a path and then get our audit hat on around ensuring compliance. Or I can invest the time today to influence the project plan and make sure we are thinking about control mechanisms upfront."

Michael Richards, General Auditor,
 State Street

84% of Agile IA
Functions are mindful
of disruption risk and
include the possibility
as part of the audit plan
development

(vs. 50% of peers)

Prepared

Agile IA Functions think ahead about potential disruptions and prepare accordingly. They are enabled by a planning process that is forward-looking in identifying emerging disruptions and associated business needs, and by knowledge sharing inside and outside the organization. They work with other lines of defense in a unified and integrated manner and make decisions mutually supported by others in the organization. In comparing Agile IA Functions to others, the differences highlight actions Internal Audit can take to boost preparedness.

Build the eventuality of disruption into planning and risk assessment

It's impossible to identify all potential business disruptions, but one can be fairly certain that at least some will occur during the course of each year. Agile IA Functions plan

for this and create flexibility in their planning and resource allocation that enables them to address disruptive events when they happen. In addition, half have increased or shifted internal audit budget to enable greater participation in areas of business disruption, compared to just 27% of less agile functions.

Last year, 52% of internal audit leaders told PwC that having a business-aligned strategic plan was an important focus for them, but just 26% of stakeholders said their internal audit leader was very effective at developing and executing one. A strategic plan provides the roadmap for building the talent and capability to address the disruptions that are likely to occur in a one- to three-year horizon.

66% of Agile IA
Functions have significantly changed the internal audit risk assessment process
(vs. 51% of peers)

77% of Agile IA
Functions have significantly
changed the mix of audits
(financial, compliance,
strategic, operational) in
the audit plan

(vs. 62% of peers)

"Our success is not measured on whether we complete our audit plan. It's important to have the ability to be nimble and have the freedom to say, 'This is more important than the audit plan."

-Jeff Hall, General Auditor, Principal Financial Group

Meaningfully collaborate with other lines of defense

Coordination across the lines of defense has been discussed for some time and most internal audit functions are working toward that. But, there is a difference between coordination and true collaboration. Internal audit functions that are welllinked work cross-functionally with the other lines of defense to address disruption as no one team can address the volume and pace of disruption alone. Their collaboration goes well beyond sharing what is in each function's plan and what findings each team is discovering.

Collaborative lines of defense have a clearly defined corporate risk appetite, leverage a common risk assessment approach, have a common

risk language across the business and a framework for clear risk aggregation and communication. As a result, their organizations derive significant value from the combined effort of the lines of defense. Our study found a consistent correlation between having Internal Audit involved in disruptors and a greater maturity in the broader organization's risk management capability. Nearly two-thirds of respondents with Agile IA Functions agree their company has a welldefined risk appetite statement and framework that is clearly communicated compared to less than half of peers. Furthermore, the majority have a formal process to aggregate risk across the company and review results against their defined risk appetite.

76% of Agile IA
Functions cohesively
partner with other risk
management and
compliance functions to
address disruption
(vs. 40% of peers)

62% of Agile IA
Functions have increased
alignment with ERM
activities, such as
leveraging a consolidated
risk universe across
assurance functions
(vs. 45% of peers)

"We have a triumvirate between risk, compliance and audit functions. For us all to do our jobs, our functions need to be joined at the hip, meeting every two weeks to catch up on everything going on. That keeps us focused and coordinates the plan so we minimize any overlap or underlap."

 $-\mathsf{Doug}$ Watt, Senior Vice President & Chief Audit Executive, Fannie Mae

Preparedness in action

A major US energy provider is completely redesigning the organizational structure of its second and third lines of defense to be on the forefront of technology disruption and other significant change. The company had a large number of new IT systems being implemented and recognized the potential for technology to create significant disruption. With so many changes coming at the organization, management knew it would be difficult for Internal Audit, and it's other risk functions, to keep up.

At that time, the company had separate Risk Management, Compliance, SOX and Internal Audit groups. Each had its own objectives with no one group charged with "putting the pieces together." Collaboration and knowledge sharing were not widespread. According to the Audit Committee Chair, management had an "ah ha" moment, realizing that each of these areas intersected with Internal Audit. Why not integrate them all under one function to drive momentum from end to end? This organization concluded it could best respond to disruption with a more unified approach.

Invest in and elevate business and technical IQ

Agile IA Functions have a command of their business strategies, risks, and the wider economic and competitive landscape. They have sufficient business acumen to identify and analyze the impact of disruptive changes and seek out internal audit

practitioners with industry expertise. Interviewees participate in peer-to-peer knowledge sharing through industry-specific auditor associations, "round-tables" and both formal and informal organizations comprised of internal audit leaders across a sector or geography. As just one example, a group of

CAEs in one healthcare subsector maintains a network that gathers annually to discuss topics of common interest, including emerging and disruptive risks. They use this forum to invite subject matter specialists, audit committee members, and other expert speakers to lead discussions that help them better understand the external environment.

Agile IA Functions also operate with a continuous learning mindset. They understand their team's subject matter knowledge strengths and weaknesses and embed various techniques to mitigate knowledge gaps, including learning from resources in the business, developing internal specialties, and seeking out external perspectives and benchmarking through peer connections and service partners. One CAE is in the process of making a significant investment in continuous learning by dedicating resources to learn the technologies he expects will disrupt his organization in one to two years.

The majority of internal audit functions have created structure through training programs, templates and methodologies. While such structure brings many benefits, Agile IA Functions go one step further. They incorporate the flexibility to deliver and communicate

various types of projects differently versus taking a one-size-fits-all approach. This allows Internal Audit to be prepared for "untraditional" projects with a basic playbook so that they are not trying to develop protocols and assess the risk simultaneously.

"If we aren't sitting side by side with people developing this stuff [blockchain, bots, etc.] we won't be able to develop the right assurance model because we won't have a deep enough understanding of how it works."

Michael Richards, General Auditor,
 State Street

Preparedness in action

Global agribusiness and food company Bunge takes several steps to maintain its business and technical IQ. A rigorous training program is in place which originates from a competency self-assessment required for all team members. Key themes are incorporated into individual development plans and a global training week. Structured Centers of Excellence have been established to deepen the knowledge of business areas and technologies and to more effectively align with key stakeholders. As a talent development platform for the company, internal audit also heavily leverages guest auditor and rotational programs to complement the audit teams and raise overall business acumen; an average of 60% of audit projects utilize guest auditors.

Prepared: Agile IA Function enabling activities

- Maintains an Internal Audit Strategic Plan
- Clearly links risk to business objectives
- Assesses risk more frequently
- Leverages consistent risk terms and definitions as other risk and compliance functions
- Meets regularly with other risk and compliance functions and promotes unified messaging, understanding of risk drivers
- Leverages industry and professional thought leadership sources and other external partners
- Performs formal skills assessments with a longer-term view of needs and actionable development plans
- Defines and tracks learning roadmaps and continuing education requirements

Maturity-inhibiting traits

- Considers the risk
 assessment a discrete
 annual activity
- Operates without a clear cross-functional understanding of the roles of each of the three lines of defense
- Uses an inconsistent or ad-hoc approach to identifying and enabling continuing education across the internal audit team

Adaptive

Agile IA Functions have flexible processes across audit plan development, audit planning, fieldwork and reporting. They also routinely reorganize or redirect resources to help the organization manage and respond to disruption. Innovative talent models such as modified guest auditor programs or access to thirdparty sourcing help Agile IA Functions adjust capacity as needed. By studying Agile IA Functions, others can identify what they may need to do to disrupt their internal audit functions in the areas of process, technology and talent.

Create more flexible processes and reporting mechanisms

Agile IA Functions have built flexibility into their operations including having a more flexible mindset. They modify the audit plan more frequently to adjust for disruptions and changes in business strategy execution. They assemble teams with the skills to address specific risks. Furthermore, they modify their execution plan, testing strategies and even testing timelines as risks are better understood to focus activities as appropriate on higher risk and higher impact areas.

The audit methodology used by Agile IA Functions also provides a framework for different kinds of audit and assurance activities, including non-assurance consulting services. As part of this methodology, Agile IA Functions are comfortable with different documentation. communication and reporting protocols when performing more tailored activities. Many interviewees pointed out the importance of simplifying and speeding-up internal audit reporting to increase flexibility and business responsiveness. For example, rather than every project resulting in a formal reporting and approval cycle, often an audit memo can suffice. Also, there may be topics where the notion of quantifying observations and expecting action plans is more combative and restrictive on the business than insightful.

"To meet business expectation, Internal Audit needs to be able to execute more agile audits. Speed and flexibility are key—getting the work done and reported quickly; less of audits running on for weeks."

 Mike Taylor, Head of Global Internal Audit, Experian plc 73% of Agile IA
Functions change course
and evaluate risk at
the speed required by
the business

(vs. 37% of peers)

63% of Agile IA
Functions have increased
the frequency of audit
plan development and
modification

(vs. 48% of peers)

71% of Agile IA
Functions have changed
their reporting and
communications approach
to allow for variation and
flexibility in the nature
and extent of formal
communications

(vs. 53% of peers)

Drive the use of data analytics and technology

Many internal audit functions are incorporating data analytics into fieldwork and testing.

Nearly half of Agile IA Functions are leveraging more advanced applications, including progressing data analytics use into risk assessment and continuous auditing, which increases the likelihood that Internal Audit will generate new insights regarding existing or emerging disruptive risks.

While the percentage of those employing these techniques needs to continue to rise, the Agile IA Functions still significantly outpace their peers. One interviewee indicated that specific data analytics exist for many audit areas for auditors to download and use to inform the plan. Leaders in this area are also increasingly using data analytics for predictive analysis such as monitoring trends and the potential impacts of disruption.

47% of Agile IA
Functions have increased
the use of data mining
and data analytics for
continuous auditing/
monitoring of trends
and potential impacts
of disruption

(vs. 35% of peers)

"I don't think auditors going in and auditing after the fact adds as much value as proactively managing risk. Proactive risk management is where you actually influence risk at the maximum level."

-Trish Oelrich, Audit Committee Chair, FHLB Office of Finance

44% of Agile IA Functions have increased investment in data analytics for risk assessment and continuous auditing

(vs. 28% of peers)

Adaptive in action

Huntington Ingalls Industries (HII) designs, builds and maintains ships for the US Navy and Coast Guard, a highly complex business. While HII's Internal Audit function uses data analytics to achieve traditional outcomes, e.g., fraud detection, they also use these methodologies to provide insight within an operational context. For example, Chief Audit Executive Scott Stabler encourages HII auditors to assess process-generated data as part of the audit protocol to determine not only areas where controls should be strengthened but also where opportunities for improvement may exist. Process variability, work in process volumes and "planning to execution" content ratios have all been part of this focus. The goal is to expand the value added potential for every auditor in the department using data analytics.

"The interdependencies with IT seem to be omni-present. No process exists without a tech component."

—Sharon O'Keefe, President, University of Chicago Medical Center

Implement flexible talent models

Staying aligned with the organization's most strategic risks requires a deep understanding of the business and advanced capabilities in innovative audit techniques. Given that businesses are changing rapidly, business understanding is no longer defined merely by longevity within the internal audit team or organization. Agile IA Functions are staffed with resources that possess a broad range of business and industry knowledge, diverse backgrounds and specialized skills and expertise. This may mean investing in strategic service provider relationships

that deliver deep subject matter and sector specialists, innovative tools and techniques, and variable resource models that enable flexibility by design.

One CAE interviewed is changing his internal audit talent model by making the function a Center of Excellence. Team members develop specific specialties that help them align to, and foster relationships with, management and develop targeted work programs. This organization focuses its recruiting on individuals with the ambition and potential to be future CFOs or CEOs versus focusing exclusively on auditing abilities.

74% % of Agile IA
Functions redirect or
reorganize resources
as needed to help the
organization manage or
respond to disruption
(vs. 40% of peers)

54% of Agile IA
Functions have altered
the mix of internal talent
to have a heavier weight
toward emerging skill
sets such as IT and data
analytics

(vs. 43% of peers)

Adaptive in action

Lockheed Martin Internal Audit is using systems of metrics and analytics to provide not only an audit function but also a surveillance function that has had a direct impact on their talent model. CAE Dr. Leo McKay realizes one could debate whether it is a second or third line of defense responsibility to monitor areas known to be problematic. Nonetheless it has become very important to how Internal Audit does its job as it allows the function to be less labor intensive. The function has freed capacity equaling nine full time equivalents through its surveillance efforts.

Adaptive: Agile IA Function enabling activities

- Builds flexibility into project methodology; different types of projects have different procedural expectations
- Incorporates a phased approach to developing test programs where the results of the first round inform focus areas for subsequent rounds
- Performs projects in areas where controls are not yet developed or operating through health-checks, maturity or progress assessments
- Uses data to enable activities beyond testing execution including risk insights, root cause identification, and predictive analytics
- Embeds data trending within the planning process to develop a "snapshot" of the area under review and inform specific inquiry and execution
- Creates a talent strategy that includes rotating fresh talent through the program after a specified period

Maturity-inhibiting traits

- Uses a methodology that creates rigidity in the structure, does not allow for variation and adds inefficiencies
- Prioritizes to consistency in execution techniques regardless of project objective or risk (i.e., limited sample size approach, controls-only focus, no IT integration)
- Prepares reporting that lacks insights for the stakeholder beyond individual control exceptions

"We want to shorten the traditional assurance periods by using continuous monitoring and an analytics based platform around operational areas to allow us more focus on thematic and strategic concerns of Audit Committees & the Board".

-Derrick Lim, Divisional VP, Internal Audit, Singapore Airlines

Powering forward

"It is a role of Internal Audit to be pioneering and proactive, and if there are changes it has to be ready."

Abdulrahman al Harthy, Chief of Group Assurance, Oman Oil Group

With industries transforming, businesses experiencing rapidfire disruption and increasing pressure on management and boards to manage associated risk, it is no wonder the gap is widening between what stakeholders expect of Internal Audit and what it has delivered. But, as confirmed in PwC's 20th CEO survey, CEOs and their management teams are optimistic about growth. They are seizing the opportunity that uncertainty brings and they need CAEs on their teams who are willing to do the same.

Disruptive risks are just one category of risk, and Internal Audit may be contributing value-added services in other areas. However, just as we identified in prior years that certain operational capabilities and effective leadership contributed to stakeholder perception of

value, stakeholders' view of Internal Audit's overall value is also strongly correlated with how internal audit functions perform around disruptive risks.

A subset of internal audit functions are leading the industry in determining the value Internal Audit can contribute to disruption. It may not be achievable just by Internal Audit improving its current activities, such as by increasing use of

"We need to be innovative to respond to disruption, which takes courage and capacity."

-Jim Hunt, Audit Committee Chair,Penn Mutual, Brown & Brown,Nemours Health System

testing analytics or through incrementally enhanced reporting. It likely means changing what Internal Audit is doing and where it's focusing, such as in more frequent proactive risk evaluations in advance of events.

Closing the gap is not rocket science, but it is challenging.

Accelerating the pace of change within Internal Audit will likely be disruptive. Substantively raising Internal Audit's value will require internal audit leaders -and stakeholders-who are committed to advancing the function and have the vision and skills to lead the change effort. With an innovative vision of what Internal Audit can be, and the agility to flex as the world around it changes, Internal Audit can accelerate its progress toward its True North and deliver the greater value that stakeholders expect and need.

Closing the value gap and achieving "Trusted Advisor" status will require:

- Increasing the team's
 operational capabilities,
 specifically around risk focus,
 business alignment, talent and
 technology
- Increasing leadership
 effectiveness to inspire
 confidence in the team and
 among stakeholders
- Increasing the team's contribution to the disruptive risks affecting the company

Actions to take now

Board Members

- Focus on your dialogue with management and CAEs to ensure you receive a more complete picture of the organization's response to disruption.
- Understand the categories of internal audit activities being performed—and at what balance—relative to where you believe Internal Audit investment should be focused.

Stakeholders

- Take an active role in increasing Internal Audit's involvement in how the business deals with disruption, including breaking down barriers such as corporate culture.
 - ♦ As the data demonstrates, there's value in empowering Internal Audit in this capacity. Those companies have managed the disruptive risk better as an organization.
- Work with Internal Audit to understand where they are spending their time and if any of those activities should be moved to the first or second line of defense.
 - ◆ Doing so may help accomplish the right balance, freeing up internal audit resources for activities better suited for the third line, while remaining closely aligned with the value drivers of the business.

Chief Audit Executives

- Be deliberate about building preparedness and adaptability into the departmental DNA.
- Take the time to think more strategically about where you are operating today and what your ideal state is. Validate your True North.
 - ♦ Is your function doing anything different today than it did three years ago?
 - ♦ Are those differences marginal or more transformative?
 - ♦ Are you realizing value in those changes?
 - ♦ Should you rethink how you are measuring your value?
 - Is transformation and disruption within your internal audit function required to remain relevant to the business?

Appendix: About the research

The 2017 State of the Internal Audit Profession Study combines qualitative and quantitative research. An online survey generated responses from 1,892 executives, of whom 58% were internal audit leaders and their direct reports and of whom 42% held management or board titles. Participants spanned a wide array of industries, geographies and company sizes.

Our survey identified a subset of respondents contributing greater value by helping their company plan for and respond to disruption. This subset of the total survey respondents (named Agile IA

Functions) was created based on two criteria: (1) their company received significant value from Internal Audit's involvement in disruptive events, and (2) their company defined Internal Audit's value as contributing something more than executing effectively and efficiently on the audit plan.

To gather qualitative data on the state of the profession, PwC also conducted one-on-one interviews with more than 70 stakeholders and chief audit executives across the globe. We thank all of the executives who gave their time to provide added insight for this year's study.

www.pwc.com/us/2017internalauditstudy

To have a deeper conversation about how this subject may affect your business, contact:

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