Financial Accounting Advisory Services (FAAS)
Fourth Global corporate reporting survey

Can innovative corporate reporting build trust in a volatile world?

Finance 4.0 and the transformation of reporting and governance in a high-risk world

November 2017

About the research

We surveyed more than 1,000 CFOs or financial controllers of large organizations to understand the challenges they face in corporate reporting. Forty-six percent of the organizations have revenues in excess of US$5b a year, and 8% have in excess of US$20b. The research was conducted by Longitude on behalf of the EY Global Financial Accounting Advisory Services (FAAS) group.

Half of the respondents were drawn from the CFO community, with 23% being group CFOs, alongside divisional and regional CFOs. The remaining 50% were finance directors, financial controllers (group, divisional or regional), or drawn from the treasury function. Respondents were split across the Americas; Asia-Pacific; Europe, the Middle East, India and Africa (EMEIA); and Japan. Thirteen main sectors were covered, with half the organizations being publicly held/listed and half being privately owned.

The survey was supplemented by in-depth interviews with the following CFOs and heads of reporting organizations, as well as EY subject-matter professionals.

Tore Bertilsson
Chairman of the Audit Committee and member of the supervisory board, IKEA Group

Craig Boyd
CFO, Department of Health, Australia

Colleen Darragh
Vice President and Controller, U. S. Steel

Jacky Lo
CFO, Yum China

Oddone Pozzi
Group Head of Finance, Procurement and IT Systems, Mondadori Group

Aaron Wong
CFO, GE ASEAN

Linda Zukauckas
Executive Vice President, Corporate Controller, American Express

Joon Arn Chiang
EY Asia-Pacific FAAS Leader

Karsten Füser
EY Global and EMEIA FAAS Markets Leader

Felipe Jánica
EY Latin America FAAS Leader

Ken Marshall
EY Americas FAAS Leader

Masanori Migita
EY Japan FAAS Partner

Mathew Nelson
EY Global Climate Change and Sustainability Services (CCaSS) Leader

Peter Wollmert
EY Global and EMEIA FAAS Leader

We would like to thank everyone who contributed their insights and knowledge to this report.

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Foreword

Corporate reporting builds trust and confidence in businesses. It gives stakeholders, such as investors, confidence and clarity on an organization's strategy, risks and opportunities and sends a strong message about the quality of the management team and the standards expected of its people.

But the trust and confidence enjoyed by businesses is being disrupted. In our hyper-connected world, the reputational impact of scandals such as data breaches and unethical conduct can be catastrophic. Trust can be destroyed forever if organizations do not keep up with the public's shifting expectations of acceptable corporate behavior, or they fail to safeguard personal data.

As finance leaders seek to thrive in this increasingly volatile and compliance-oriented world, the CFO's agenda is evolving. EY has conducted this research annually since 2014, and in our earlier studies finance leaders were focused on connected reporting, finance talent and the transformation of the finance operating model.[1]

Today, their focus has shifted to the external risks for reporting. These range from the difficulties of managing risk when disconnected systems cannot provide data synchronized with the cultural risks of individuals failing to comply with acceptable ethical behavior. Finance leaders have increasing responsibility for making sure that failures of control do not lead to costly media exposure or regulatory attention.

To manage these risks, and build trust in their businesses, finance leaders and corporate reporting should explore two critical areas. First, advanced data analytics and integrated technologies – what we call "Finance 4.0" – can position them as the "trust-giver" to a wider group of internal and external stakeholders – such as boards and regulatory authorities – around both financial and nonfinancial information. Second, a rethink of traditional approaches to corporate governance can give audit committees and boards the competencies and sophisticated insights they require to provide effective oversight and support effective compliance and control.

By focusing on the power of Finance 4.0, and putting in place a robust governance model, CFOs and board leaders can allow corporate reporting to play a leading role as a confidence-builder in today's heavily scrutinized world.

Peter Wollmert
EY Global and EMEIA FAAS Leader

1 *Connected reporting*, EY, 2014; *Are you prepared for corporate reporting's perfect storm?*, EY, 2015; and *How can reporting catch up with an accelerating world?*, EY, 2016.

Executive summary

A disrupted reporting environment: technological, political and social risks are on the rise

Two major shifts are changing corporate reporting and governance. First, innovative technologies and sophisticated analytics are becoming key to managing growing risk and volatility to help organizations meet increasing compliance requirements. Second, as the political and social environment changes, the rules and norms of business – regulatory standards, accounting standards, legal protocols and ethical regimes – are evolving in response. These trends are affecting corporate reporting in two areas: the way in which financial statements are prepared; and the financial oversight provided by audit committees and supervisory boards.

Preparing financial statements: smart reporting data and innovative finance technology are key to governance and oversight

Data analytics and innovative new technologies – an important element of what we call "Finance 4.0" – can help the finance function to operate differently, add significantly more value to the business and become the trust-giver to a wider group of stakeholders around nonfinancial information. This should be in real-time, at a greatly reduced cost, with more automated control and lower risk. However, finance leaders face significant challenges here: there has to be an effective approach to data governance and there is the perennial obstacle of systems integration.

Audit committees and supervisory boards: new competencies and data-driven insights powering financial oversight

The reporting requirements of audit committees and boards are changing in two ways. **What** they do in terms of where they are focusing their attentions and the competencies they need for effective oversight. And **how** they provide oversight, with boards requiring more regular, real-time and relevant information to perform their role effectively.

A way forward: rich data combined with smart technology powers new governance era

Whether people trust an organization depends on a whole host of reasons, from the tone of their communications to the personal integrity of the senior leadership team. But taking a different approach to reporting and governance is likely to be an increasingly important factor. This is about reporting teams drawing on multi-dimensional data, as well as technology advances, to deliver the reporting insights that stakeholders who have governance responsibilities, such as board members, seek to fulfil their role. Board members will tap into sophisticated, forward-looking data that helps them to fulfil their oversight role. Those organizations wishing to deliver those insights should consider managing data as a strategic asset; shift the finance mindset to embrace technology innovation; and challenge traditional governance and board structures.

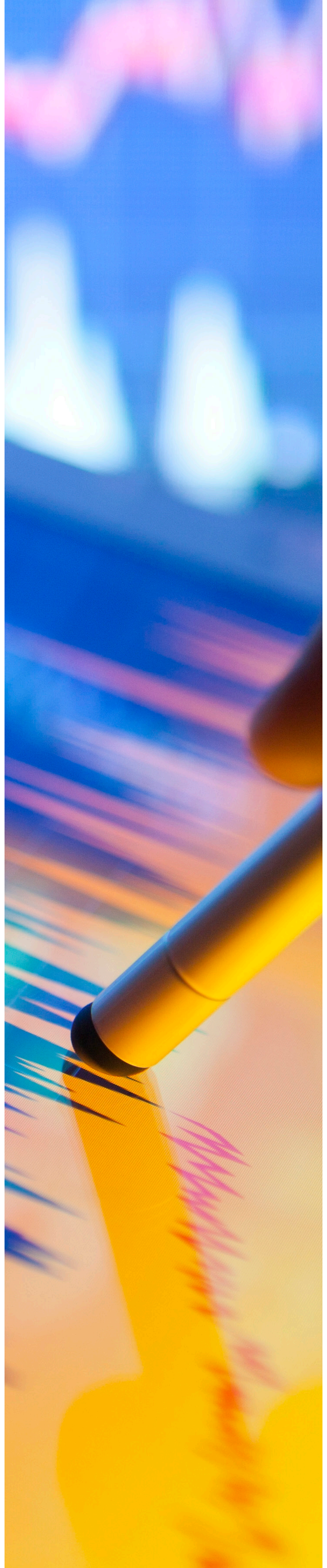


Figure 1. The trust business: driving reporting and governance effectiveness in a volatile and fast-changing world

A challenging environment for corporate reporting

Technology and data innovation risks and challenges

Systems

65% say uncertainty about the risk of using new technologies to transform reporting, such as cloud computing, is affecting reporting effectiveness

Data

64% say lack of clarity over data ownership and data governance is affecting reporting effectiveness

Governance risks and challenges in a compliance-oriented world

Standards

72% say the need to align reporting with ever-changing accounting standards is affecting reporting effectiveness

Compliance

71% say the complexity of changing compliance requirements at a local and international level is affecting reporting effectiveness

Key impacts

How financial reports are prepared

85% Data will be king, but a significant majority say "assessing the different security standards for data centers versus cloud computing" is challenging.

53% Finance technology innovation will be critical, but more than half of finance leaders – 53% – say lack of integration between IT systems is a significant systems challenge.

The financial oversight provided by audit committees and boards

58% What audit committees and boards do in terms of their oversight role is changing: 58% say committee members will need to build up their understanding of analytics' role in risk management.

82% How audit committees provide oversight is changing: a significant majority say audit committees and boards are putting a much stronger focus on corporate culture and its impact on compliance and fraud prevention.

A way forward

1. Manage data as a strategic asset.
2. Shift the finance mindset so that it embraces technology innovation.
3. Challenge traditional governance and board structures.

1

A disrupted reporting environment: technological, political and social risks are on the rise

Effective, high-quality corporate reporting has a significant positive impact on a business. It builds stakeholder trust and confidence in the management team, the choices they are making about the organization's future, and the behavior of their employees. Now, two major shifts are changing how finance and board leaders should think about corporate reporting and governance.

First, the world is changing rapidly as the fourth industrial revolution, or Industry 4.0, gathers pace. Innovative technologies and sophisticated analytics are becoming key to managing growing risk and volatility which can help the organization meets increasing compliance requirements. But many organizations are struggling. They are held back by legacy systems that cannot talk to each other and are worried about the complex risks that come with increasing volumes of data. While data analytics is a significant opportunity, it also raises challenges and risks for finance leaders that want robust answers (see "The challenges of the data opportunity: key questions for finance and board leaders"). The right answers will be key to avoiding the reputational and other costs that come with a failure in how organizations manage finance and other reporting data.

Second, the political and social environment is changing. Over the past 12 months, voters in the UK and US have pushed back against globalization and a more nationalist agenda has emerged. The public mood is shifting on how companies behave – from individual ethical behavior to how organizations use personal data and how businesses manage their tax affairs. This is leading to new regulatory, legal, and ethical regimes. Regulators, for example, are putting the spotlight on corporate culture and the tone that comes from the top.

Peter Wollmert, EY Global and EMEIA FAAS Leader, points out that increasing scrutiny has raised the expectations placed on supervisory boards and CFOs. "Internal misbehavior is a significant issue in the public domain at the moment," he says. "And when you have a scandal, the inevitable questions that people ask are 'Who is in charge?' and 'Did the leadership team put in the right infrastructure and tone from the top to avoid these risks?' Increasingly, the public is questioning the role and responsibility of the supervisory board in managing those risks. And today, CFOs have increasing responsibility for keeping their organizations out of the public spotlight and avoiding regulatory attention as we move into a much more compliance-oriented world."

The challenges of the data opportunity:
key questions for finance and board leaders

- Do we understand the impact of political trends on finance data protection and security, such as where data centers are located, what laws they are subject to, and what taxation authorities they are governed by?
- Are we confident that our approach to finance data protection, privacy and compliance is up to date with changing political trends and societal expectations?
- Do we understand the challenges and risks of moving finance data to the cloud, such as managing the impacts on data protection and data security?
- Are we protecting our finance data from internal risk by building a culture of data security within the finance team and developing our people's security awareness?

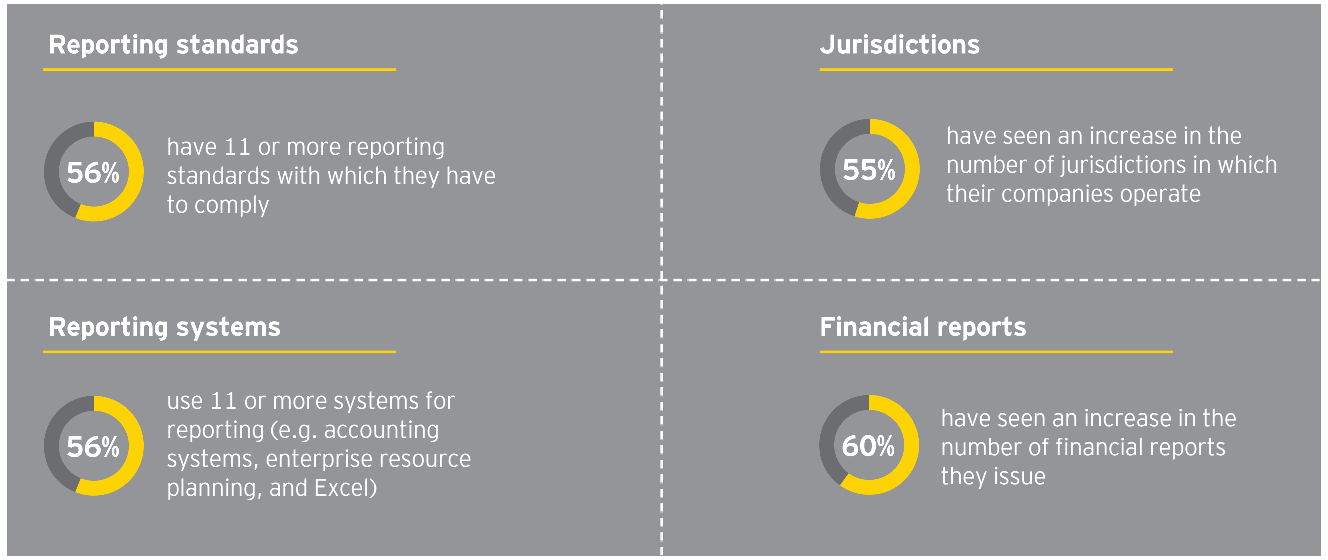
As Chart 1 shows, finance leaders surveyed feel that addressing the risks and challenges of this changing corporate reporting environment is essential.

Chart 1. To remain effective, corporate reporting should adapt to changing compliance, legal, regulatory and technology risks

Responding to these challenges poses significant questions of finance and reporting teams. Our research shows that finance teams face a reporting environment that is both complex and highly demanding. Most organizations need to comply with a significant number of reporting standards, for example. Demand for reporting information is also increasing, with most companies issuing many more financial reports (see Figure 2).

> Our research shows that finance teams face a reporting environment that is both complex and highly demanding.

Figure 2. Heightened complexity and demand for corporate reporting



Sogo shosha: a bigger global footprint brings significant complexity

Japan's general trading companies, the *sogo shosha*, supply everything from energy and metals to grains and textiles. As they have extended their global footprints overseas, complexity has become a fact of life.

"As a significant sized parent company, we have many subsidiaries and affiliates and continue to activate M&A," explains a representative director of one of the *sogo shosha*. "Internal control and techniques for risk reporting have become more complex and more important. One example is where you are prohibited from taking national or international data out of a country."

"We also have to be very careful about treating data correctly and maintaining sensitive data processing," he adds. "Another example is disclosure requirements, which often evolve as a result of policy changes in different countries, including changes in national reporting standards. These developments could be caused by a change in the political environment, so it's important that leaders with international responsibilities keep their eyes open for regulatory and market changes."

In the face of this complex and demanding environment, finance and board leaders should focus their efforts on the critical areas where corporate reporting should change to retain the trust of stakeholders and wider society. Two areas in particular will be important:

1. **Preparing financial statements:** in our view, the combination of smart reporting data and innovative finance technology will be key to supporting governance and effective oversight.

2. **Audit committees and supervisory boards:** in our view, audit committees and boards will need exposure to new competencies and more forward-looking, data-driven insights to provide effective oversight.

We examine these two areas in more detail in the sections that follow.

2

Preparing financial statements: smart reporting data and innovative finance technology

The ability to analyze accurate data at high speeds and act on it in close to real-time can help finance and reporting leaders to respond rapidly to market challenges and better manage today's volatile risk environment.

Technologies allow us to turn vast amounts of structured and unstructured data into insights that can redefine finance and reporting. Technology, along with changes in how finance functions operate, including incorporating new skills and providing a view of trust and long-term value, is a new stage in the evolution of the finance function, Finance 4.0.

Figure 3. Finance leaders' ambitions for Finance 4.0 face significant challenges

Finance 4.0 is a top priority for finance leaders

Number 1 priority

"Upgrading IT and financial data analytics tools to professionalize finance management" is today's top corporate reporting priority

87% Plan to increase their investment in corporate reporting technologies over the next two years

Data challenges

56% of finance leaders say "managing data security and privacy" is the main data challenge of today's corporate reporting environment

42% say implementing a data governance model for differing countries' privacy laws is "very challenging"

Technology challenges

53% of finance leaders say "lack of integration between IT systems" is the main systems challenge of the current reporting environment

Number 1 concern "Concern over data security and compliance risks" with cloud computing is the number one barrier to implementing new finance technologies

Karsten Füser, EY Global and EMEIA FAAS Markets Leader, says that data will be key to finance building trust and confidence with key stakeholders, and will drive the next level of efficiency and effectiveness in reporting. "Data and technology innovation should allow finance to become the trust-giver to a wider group of stakeholders around nonfinancial information, much in the same way as it provides trust and confidence for investors around financial data," he says. "This should be in real-time, at a greatly reduced cost, with greater automated control and lower risk."

Finance 4.0: The key technologies	
Mobile	Mobile devices mean that information is not constrained to the desktop, which allows data and insights to flow to decision-makers in real-time.
In-memory computing	By drawing on data from enterprise resource planning (ERP) and other applications much more quickly than would be possible from individual systems, in-memory computing enables very large volumes of data to be aggregated and analyzed quickly.
Predictive analytics software	Predictive analytics software uses data to identify trends, for example in areas such as risk assessments and fraud outlooks.
Artificial intelligence (AI)	AI systems such as Siri, Google Now and Cortana are capable of handling very large data sets and making sense of them much more efficiently than humans. The key advantage these systems have over traditional data and analytics is the ability not just to follow rules, but also to recognize patterns and learn and adapt to new situations, including new accounting or tax regulations.
Cloud computing	In the cloud, employees can access critical company information remotely from any location, which removes the constraint of local networks and makes data more accessible. Cloud models that employ in-memory computing also help organizations to access real-time data on demand, allowing them to identify issues within the business quickly and respond more efficiently. And analytics and business intelligence capabilities are embedded within cloud-based applications rather than residing in separate applications.
Robotic process automation (RPA)	RPA tools can access disparate systems, review the contents, and put the data in a standardized format, and RPA advances mean these tools can handle both structured and unstructured data.
Blockchain	Blockchain records transactions using a distributed ledger, which gives every network participant a secure audit trail of all transactions ever made — in near real-time. It allows trade directly between parties without the need for intermediaries.

GE and Finance 4.0

GE is using new technologies to transform its finance function, with cloud-based data and RPA used to execute streamlined and effective processes.

“About six years ago, we started on the journey of centralizing accounting operations — as well as other enterprise-wide processes — in a Global Operations team, which has its Asia center based in Shanghai,” says Aaron Wong, CFO for the ASEAN business of GE. “By centralizing and connecting support services from five global functions into one framework, we’re taking a wing-to-wing approach across GE to streamline and standardize company operating processes and ensure consistent quality. And a few years ago, we went down the path of RPA to support speed and quality of services. So, for example, when it comes to paying a vendor, you have the purchase order, the invoice, and the delivery note, and a robot executes that three-way match automatically without intervention by a human. To be able to deal with all that, you need free movement of this non-personal data in a fairly integrated and regulated infrastructure, with security protocols that protect it.”

American Express and Finance 4.0

Linda Zukauckas, Executive Vice President, Corporate Controller at American Express, believes that RPA is a critical tool for finance in a data-rich world, and she has set up a center of excellence (CoE) to explore new applications and approaches.

“RPA is a great tool, and I see it, in its generic form, as a system-agnostic way to link, connect and analyze data,” she says. “RPA offers an inexpensive way to quickly bridge systems and avoids the need to build a system interface.”

“We have established in our global controllership function an RPA CoE that works with colleagues globally to evaluate the feasibility of potential RPA builds,” she explains. “The CoE group then works with our teams to do those builds and run and monitor the processes. The CoE works with the internal customer to establish accountability, as it is important to make sure the RPA routines run as expected.”

Challenges of Finance 4.0

Our research shows that many finance and reporting teams face significant challenges in making the transition to smarter finance and Finance 4.0.

For Joon Arn Chiang, EY Asia-Pacific FAAS Leader, part of the challenge for finance and reporting leaders is balancing the reality of existing priorities with the expectation that they should be investing in the future. “Especially for those in smaller companies or in weak economies, where perhaps headcount is getting cut and there’s pressure on costs, finance leaders are struggling just to deal with the ongoing day-to-day operational stuff,” he explains.

“To move forward, they need to accept that they cannot do everything. Instead, they should start somewhere, say with robotics,” he says. “Once they get that into play, they can hire some data analytics people to utilize the data that has been generated. The important thing is to actually get started and not be afraid of failure.”

Biometrics: the future of Finance 4.0?

As intangible drivers such as human capital (workforce value) or social capital (the trust levels enjoyed by companies) make up a growing percentage of organizational value, current accounting and reporting approaches will need to evolve to better address these drivers.

Mathew Nelson, EY Global Climate Change and Sustainability Services (CCaSS) Leader, says that we could see a wave of technologies such as biometrics become an increasingly important part of reporting intangible value, as organizations define new metrics and seek new data.

“There is a discussion about a large retailer potentially putting technology into its stores that scans the faces of customers at the checkout,” he explains. “It means that if a customer frowns or looks unhappy, it will trigger a member of staff to make contact to see what the issue is. That could allow them to use customers’ faces to see where customer satisfaction is going up and down. If customer satisfaction is going up, you can let investors know that the value of customer satisfaction levels is on the rise.”

Two significant roadblocks emerged from our research of more than 1,000 finance leaders around the world.

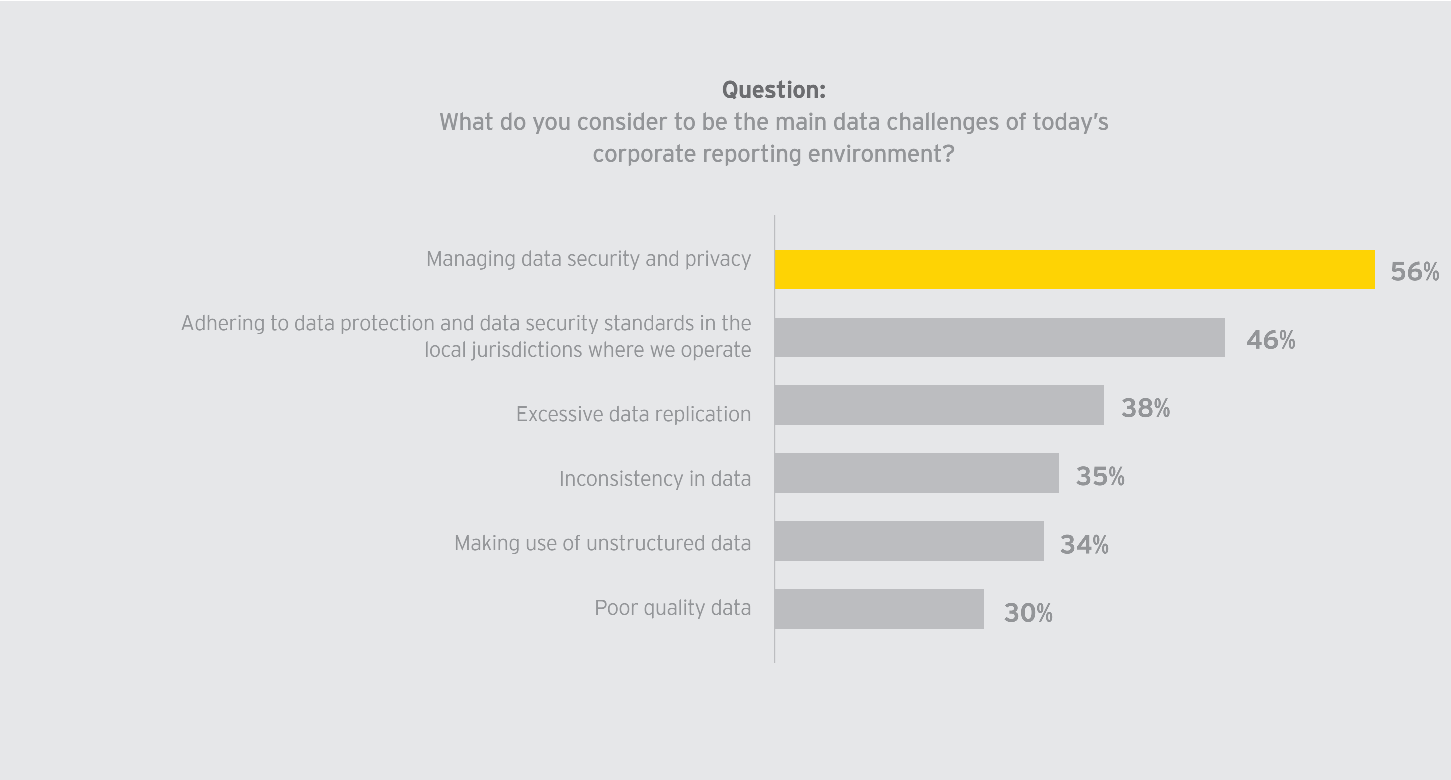
First, they are concerned about the effective governance of finance and reporting data as organizations seek to exploit the data they have at their disposal. Second, there are the constraints of existing finance technology, with many finance teams struggling with inflexible, disconnected legacy systems.

Roadblock 1: Effective governance of finance data

Effective governance of finance data in terms of protection, privacy and compliance is often a major headache for finance and reporting leaders.

While issues such as data quality are a concern for only 30% of respondents, more than half are worried about managing security and privacy (see Chart 2).

Chart 2. Security, privacy and compliance are the top data challenges

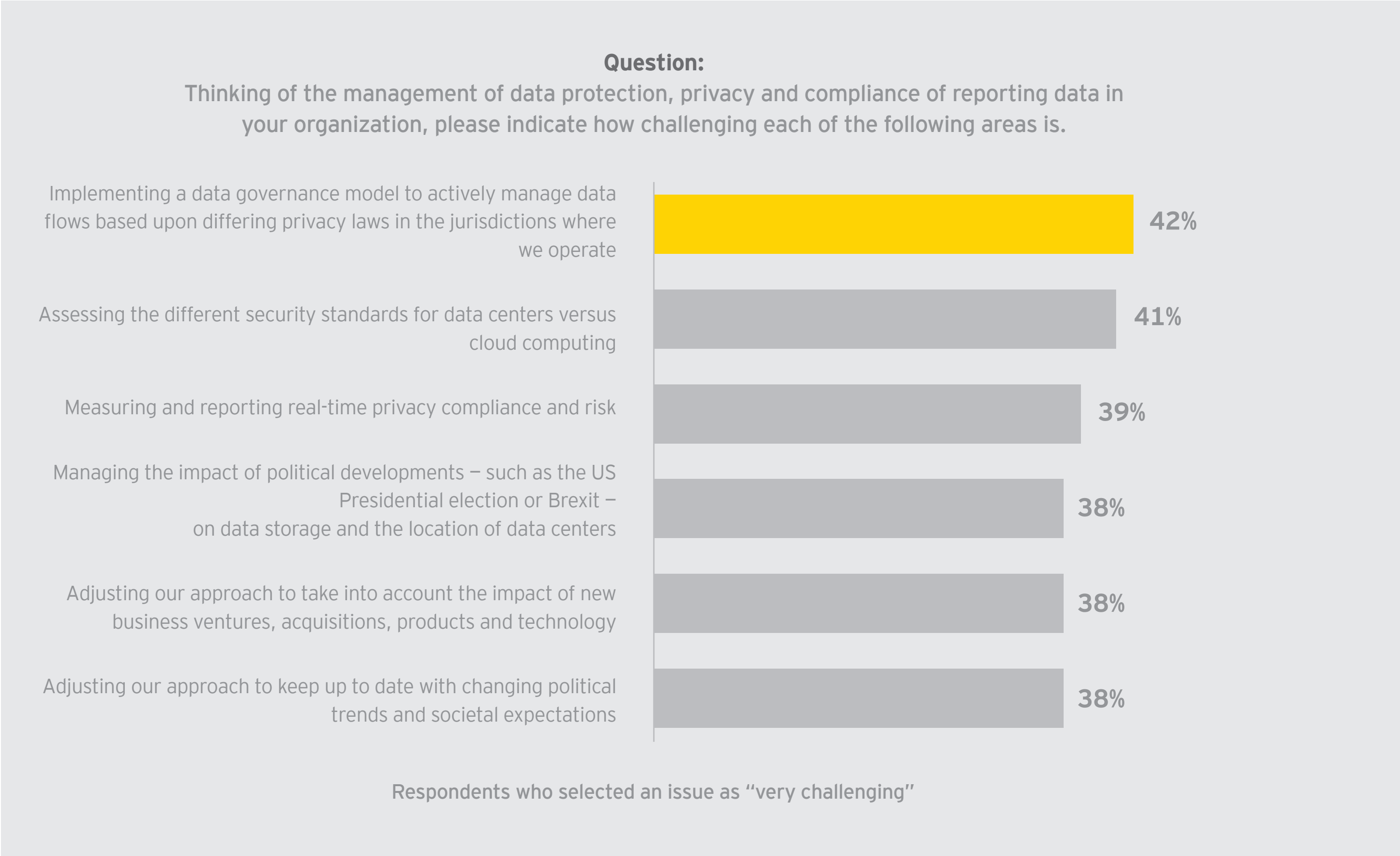


At Yum China, China's largest restaurant company, which operates over 7,600 restaurants in more than 1,100 cities as of the end of May 2017, data security is a key risk focus and an area where the audit committee plays an active role.

"We have over 100 million loyalty customers whose personal information sits in our database as of the end of May 2017, and we have an obligation to make sure their data is protected," explains Jacky Lo, Yum China's CFO. "This is a topic we discuss with the audit committee basically every time we meet, where we present our current data security status. What are the systems we have put in place? What are the processes and controls to address or mitigate any deficiencies in our overall data security systems? The committee requires us to perform health checks, and one of the members even suggested we hire a specialist firm to simulate external hacking into our system so that we can identify any potential issues."

Looking at these finance data governance issues more closely, we see the scale of the challenge. For example, 85% of finance leaders find it either "very challenging" or "somewhat challenging" to actively manage data flows based upon different jurisdictions' privacy laws. Even if we set aside those who find data issues "somewhat challenging," and focus only on those who find the issues "very challenging," there are a significant number of finance and reporting teams who see data governance as a significant barrier to overcome (see Chart 3).

Chart 3. Complexity of the data governance environment is a significant challenge

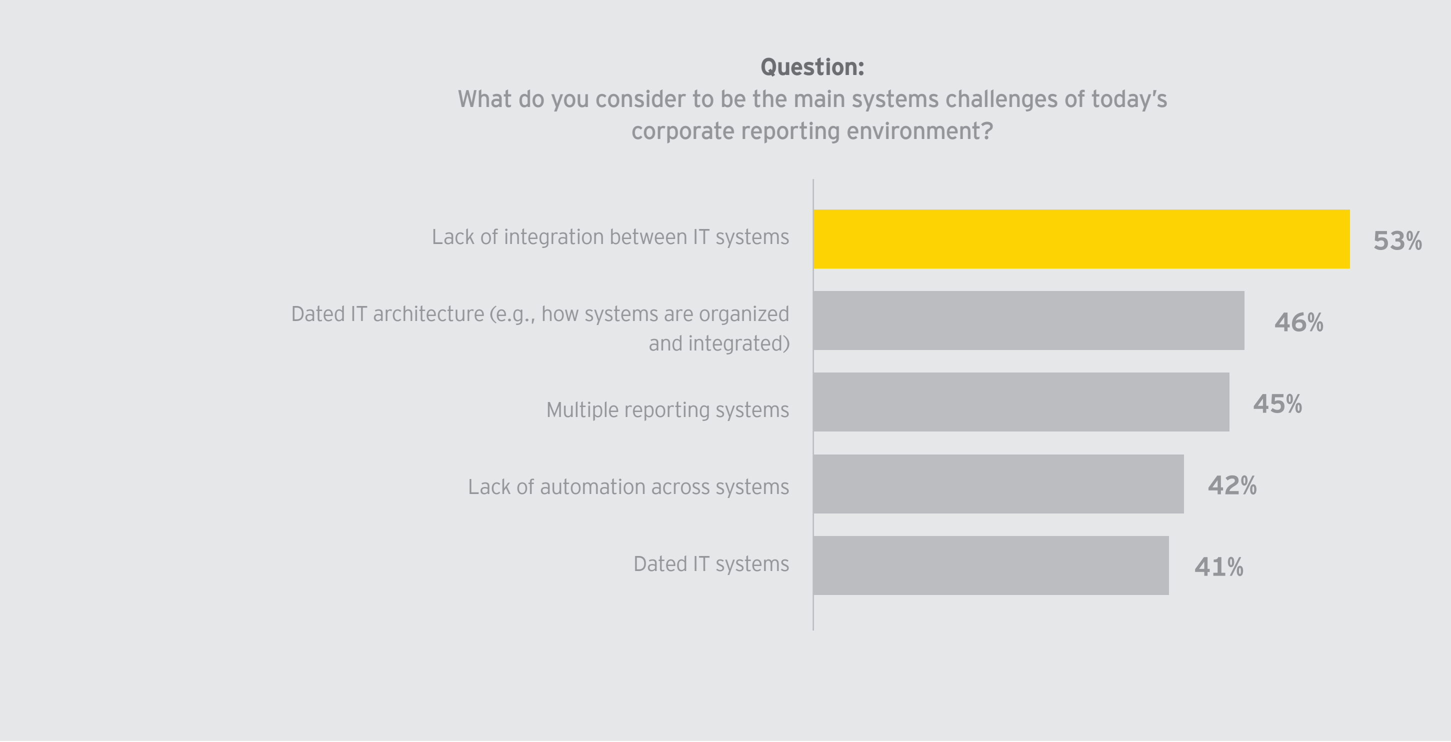


Roadblock 2: Inflexible existing technology

Many finance functions today inhabit a world of batch-based legacy systems, often with complex processes and deeply embedded, disparate sources of data.

These systems have become efficient and stable over a number of years, but it is this very stability that presents a key obstacle in the evolution to a digitally integrated business. For example, as Chart 4 shows, the perennial challenge of systems integration continues to stand between finance teams and their ability to innovate through technology.

Chart 4. Dated, non-integrated systems are a significant roadblock



2. Preparing financial statements: smart reporting data and innovative finance technology

Getting ahead

To overcome these roadblocks that stand in the way of technology innovation, finance and reporting teams should focus on two areas:

1. Collaborating with teams across the business to develop an information governance approach.

2. Managing the data security and compliance challenges when implementing new technologies.

Collaboration with teams across the business

For finance leaders, headlines about failings in data governance are cause for concern, but they are not the only driver for teaming across the business. If the function tackles its particular risks and challenges in isolation, it will miss out on relevant knowledge and experience from previously completed work, and the resources and technology available in other functions of the business such as legal and IT.

For example, Colleen Darragh, Vice President and Controller of U. S. Steel, explains that finance links in with the organization's wider efforts on data protection. "The world has changed dramatically in the last 10 years, from a data security perspective," she says. "The upshot for us is very intensive focus across the corporation on data security awareness training and protecting confidential information. It's not something we think about just with respect to financial reporting. We think about it more broadly as an entire organization — how do we protect our most critical and sensitive information?"

With the benefit of a broader understanding of the complex dependencies between risks and existing information risk management initiatives, an integrated approach to information governance can help tackle complex areas such as:

- **Responding to regulatory requirements.** Rigorous compliance requirements may include international standards, such as EU laws or regulations issued by the U.S. Securities and Exchange Commission (SEC).
- **Increasing global flows of data.** As volume increases and new information systems are procured, information may shift around the globe. As this happens, organizations tend to lose their understanding and control of what information is stored where. This introduces risks when they have to apply record retention policies, respond to discovery or regulatory requests, and determine compliance with privacy requirements. If companies cannot identify data and dispose of it in accordance with retention policies, then that data may be discoverable.

Improving your finance information governance

- Does your organization have an information governance strategy? Are information governance objectives defined and communicated, and are resources allocated?
- Are information governance policies and procedures well defined and socialized throughout the organization?
- Does your company effectively meet legal and regulatory requirements?
- Do you have clear understanding and agreement on how key finance information assets would be governed in the cloud, such as articulating which roles and people can access information, and what rules we need to govern how information is shared?
- Are information governance risks considered when business decisions are made? For example, if you have rolled-out a bring-your-own-device technology model, did it consider the risks holistically?

Source: *Information governance for the real world*, EY, 2015.

Managing the compliance challenges of new technologies

Many organizations are committed to modernizing and transforming the technology that underpins the finance function. Our research finds that 87% of organizations surveyed plan to increase their investment in reporting technologies over the next two years.

However, even with a strong investment commitment, organizations face significant barriers in implementing innovative new systems. In particular, there is some concern from finance and reporting leaders as they consider making the transition to cloud computing.

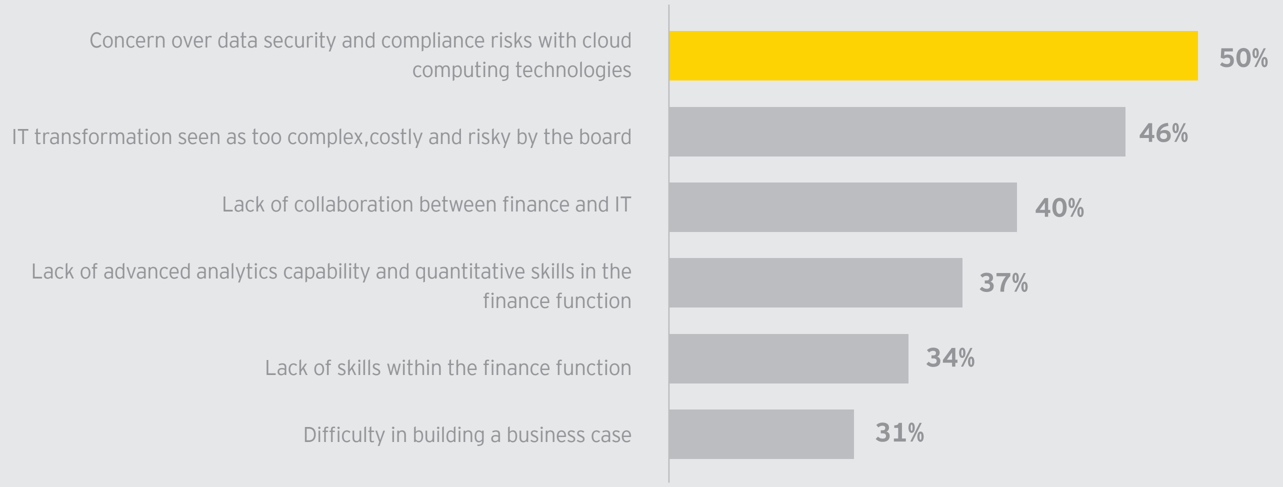
As Chart 5 shows, concerns over cloud compliance risks are the number one barrier to technology innovation in finance, according to group CFOs.

While cloud computing is largely borderless, compliance is not, and organizations should be aware of where their cloud provider's servers are physically located. Furthermore, many organizations have to comply with laws that restrict trans-border information flow. For example, for many publicly listed US companies, cloud adoption may not be an option if the servers are based overseas.

Kenneth Marshall, EY Americas FAAS Leader, believes that developing an approach to the cloud and cloud compliance is of increasing urgency for finance leaders in a future where new technology releases and capabilities may only be delivered through the cloud. "The major vendors are moving in this direction and it's unlikely that upgrades to your current ledger systems are going to keep pace with the gold standard and the latest and greatest in financial technology," he says. "You could end up with service degradation in terms of your software provider. Also, as companies are looking more and more at robotics and data analytics, those capabilities are getting increasingly built-in to the major vendors' software. You don't want to necessarily invest in building those capabilities yourself and you could find that the robotics that you do build quickly become outdated."

Chart 5. Group CFOs identify significant challenges of finance technology innovation

Question:
What do you think are the biggest overall barriers to your organization implementing innovative new finance or reporting technologies and tools?



By Group CFO respondendts only

2. Preparing financial statements: smart reporting data and innovative finance technology

Action areas: finance in the cloud

- **Review cloud-based service-level agreements (SLAs) around cloud security.** Cloud providers will often offer standard SLAs that generally limit the liability of the provider, so there may be a need for increased negotiation in order to mitigate security concerns.
- **Determine the cloud deployment model across private, public, community and hybrid approaches.** With a clear understanding of how much data control and privacy are required, organizations can determine the appropriate deployment model for the long-term.

Executive action area: rebooting financial statements

The finance function plays a critical role in providing trust and confidence for investors around financial data.

Finance leaders should exploit innovative technology and advanced analytics to provide meaningful financial statements that articulate not only financial performance, but also how the organization operates in — and responds to — the legal, regulatory, social and political environment.

The finance function plays a critical role in providing trust and confidence for investors around financial data.

3

Audit committees and supervisory boards: seeking new competencies and data-driven insights

Audit committee and supervisory board members already face significant time pressures and responsibilities. As the risk environment changes, and the challenges facing corporate reporting mount, organizations should decide whether their governance arrangements are fit for the future.

Are board members asking the right questions of CFOs and management teams? Do board members have the insight they need?

Two areas are particularly critical to answering these questions:

1. What audit committees do in terms of their oversight role.
2. How audit committees provide oversight.

What audit committees do

Today's volatile and fast-changing environment is making areas such as internal controls, compliance and culture, and fraud prevention increasingly important.

When we asked respondents to select the main priorities of their audit committee and board in terms of their oversight role, we found that implementation of new accounting standards is the top priority for public companies. For private companies, the top priority is fraud prevention.

Tore Bertilsson, Chairman of the Audit Committee and a member of the supervisory board of the IKEA Group, points out that the information requirements of boards needs to reflect the core distinction between governance and management, so that requests for information do not see boards straying into management territory. "The information a board receives should not lead it into being seen as getting involved in the day-to-day management," he says. "Boards need to fulfill their oversight role, but management needs to be able to make decisions and take action."

Assessing expertise and developing new competencies

Board and committee members face increasing expectations from the public and media in managing key risks such as lapses in individual behavior. Peter Wollmert believes that organizations may need to rethink the profiles of people on supervisory boards.

"Organizations should analyze their business models to put together a complete overview of the risks facing these companies," he says. "They can then decide what profiles are needed to get these things properly managed, and have a justification for the audit committee members they have hired."

The evolution of corporate governance around the world

Growth-oriented governance in Japan	Proactive corporate governance in Latin America
As the Japanese Government looks to boost business competitiveness, corporate governance reforms are taking hold. Bloomberg, for example, reports that "most TOPIX (Tokyo Stock Price Index) companies now have at least two outside directors."[3] However, Masanori Migita, FAAS Partner, Ernst & Young ShinNihon LLC, points out that just having directors will not drive improvements if those directors do not have influence and decision-making powers. "Japanese companies are trying to meet society's expectations in order to improve their corporate governance," he says. "In a number of cases, these efforts to change have been made to meet investors' expectations. But, having introduced these independent directors, are they giving them sufficient power in decision-making processes?"	Corporate governance is growing as an important public policy in Latin America according to Felipe Jánica, EY Latin America FAAS Leader. "Corporate governance in Latin America is something that is waking up right now," he says. "In the past, being a board member was something that was seen as a privilege and good for your reputation in the business community. Now, there is a growing realization of how comprehensive your responsibilities are. In the past, board members would be very reactive, and expect management to report any issues to them. "Our conversations with board members are around making their proactive responsibilities clear. In other words, that by being a board or audit committee member you have this new right to let the management know what is good and what is bad on the policies that are being approved."

With an increasing focus on technology and data challenges, finance leaders believe that audit committee members will need new competencies to fulfill their oversight role effectively (see Chart 6).

This includes the need to build their understanding of data analytics as both an opportunity (for instance in supporting risk management) and a challenge (for instance in ensuring that there are compliant legal frameworks for data hosting).

Board and committee members face increasing expectations from the public and media in managing key risks such as lapses in individual behavior.

3. *Japan's corporate governance overhaul*, Bloomberg Intelligence, January 6, 2017.

Chart 6. New competencies and skills are being sought for board members

Craig Boyd, CFO at Australia's Department of Health, says that the need to provide rigorous oversight of technology risks is changing the information requirements and backgrounds of board members there.

"When boards are looking at areas such as how IT knows that access controls are working, they'll get the relevant people in and increasingly ask them to show hard evidence," he explains. "They don't just take things on faith – they want to see proof. And, as well as financial specialists, we also have people who have a strong IT background, including one who was a CIO in a previous life. Committees are trying to make sure they get a comprehensive view, and bring fresh perspectives and skills to the role they perform."

For Oddone Pozzi, Group Head of Finance, Procurement and IT Systems at European media company Mondadori Group, organizations should consider board members who bring experience from other industries to complement those board members who have experience in the company's core sector.

"Personally, I would encourage adding independent board members that bring to the table a different perspective, developed in different industries," he says. "You need a balance between people who are from your industry, which is definitely something we need, and people who bring different experiences. If you just have people who have always played in your industry arena, they only know how to play that way. Given the challenges of today's environment, where technology is changing business models, experience of other industries or environments can bring new insights and solutions."

Action areas: finance in the cloud

- **Get new perspectives.** If board members require knowledge of emerging topics such as data risk, inviting external subject-matter experts to meetings can provide an essential perspective. Alternatively, board members can visit sites or businesses, for example, to meet innovators and thought leaders in emerging topics in Silicon Valley.
- **Shift mindsets about what constitutes a board member.** As boards look for new members with skills in emerging areas, they can consider bringing on board candidates with significant digital experience, even if they have less prior boardroom experience. With the right induction, training and mentoring, candidates like these can become effective boardroom contributors while bringing a different dimension to boardroom debates.

Preparing internal audit for new challenges

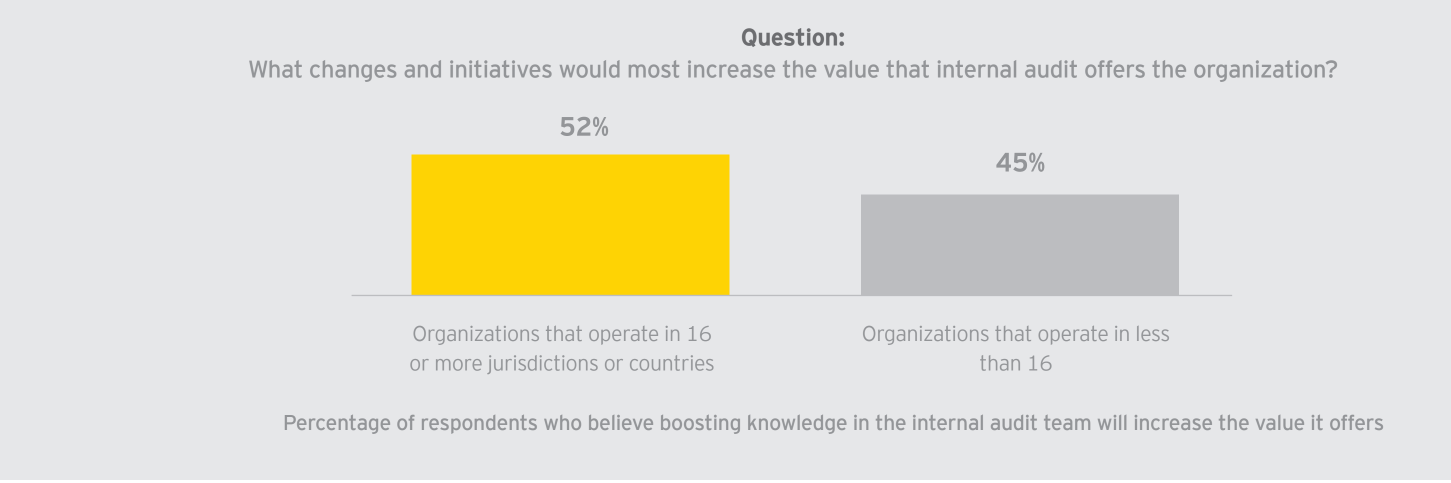
A rapidly changing world brings new challenges, such as the risks posed by social media, digital, and mobile channels. Internal audit should therefore progress if it is going to continue to provide assurance to the board about how effectively the organization is managing emerging and growing risks.

Perhaps organizations are finding that the prevailing company culture is actually fuelling the chances of employee misconduct. For example, a win-at-all-costs culture in the sales environment can lead to mis-selling. As they introduce culture change programs to encourage the right behaviors, internal audit can play a valuable role. For example, it can provide assurance on how the program is progressing against its goals through regular surveys — it can take the organization's pulse in order to understand whether the culture is moving in line with compliance activities.

Finance leaders and boards should ask whether internal audit has the skills and knowledge to deal with risk areas that are emerging and growing in importance.

In our survey, we find that this is particularly important for more complex organizations. Over half of organizations that operate in 16 or more jurisdictions or countries believe that increasing knowledge in the internal audit team will improve its ability to add value (see Chart 7). Boosting knowledge, for example, would help complex multinational companies to manage different risks as they enter new markets.

Chart 7. Internal audit could benefit from a knowledge boost



Action areas: driving internal audit improvements

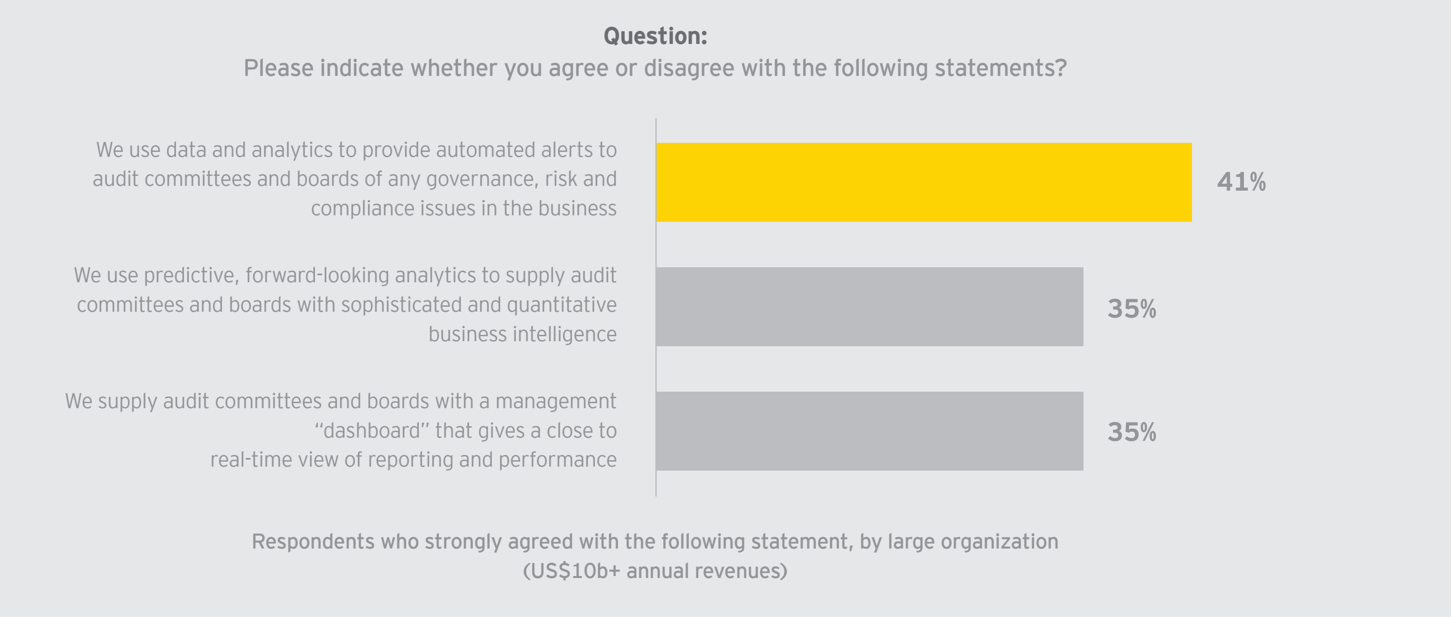
- **Develop the team's skills and knowledge by upgrading and investing in learning and development.** For example, focus on the communication, presentation and advocacy skills required to interact with senior executives, non-executive directors and regulators.
- **Make more use of sophisticated analytics.** For example, use data and analytics to enable continuous monitoring and quickly reach conclusions based on hard evidence.
- **Update risk assessments, audit plans and audit techniques for a digital age.** For example, update approaches to take into account growing risks that come from developments such as cloud computing or automation. For example, what will the recovery approach be if heavily automated processes are brought down by a major systems failure?

How audit committees provide oversight

Increasing volumes of data, as well as advances in analytical tools and capabilities, have transformed how organizations generate insight. However, organizations should question whether the information they present to audit committees and boards has evolved in line with these developments in terms of the sophistication of the content and how it is delivered. With more sophisticated insights, organizations can improve the quality of board debate and decision-making, transforming the effectiveness of oversight.

Our survey shows that some organizations — particularly the larger ones — are making progress here. Only 19% of small organizations (those with annual revenues of up to US$1b) agree strongly that they are supplying their boards with a management dashboard that gives a close-to-real-time view of reporting and performance. But this increases to 35% for large organizations (those with annual revenues of more than US$10b). Overall, one-third of large organizations are making progress in the use of sophisticated analytics to provide boards with reporting intelligence (see Chart 8).

Chart 8. Larger organizations are providing boards with sophisticated insight



Updating the organization's approach to how audit committees and boards provide oversight likely requires change in both the content and the user experience:

Content changes	User experience changes
Providing regular, material data to boards in a dashboard format that not only articulates financial performance, but also performance and risks in the legal, regulatory, social and political environments. For example, data-driven insights that provide a perspective on cultural or reputational issues, such as how many calls there have been to the organization's whistle-blowing hotline or customer satisfaction scores.	More visual reports, using dashboards and infographics, allow readers to quickly grasp the salient points. Readers are not overwhelmed by reports that are too dense, because drill-down facilities allow them to control the content and look deeper into the data that interests them.

Executive action area: moving forward with governance

The information needs of audit committee and supervisory boards are changing. Increasingly, they want to receive regular, material data in a dashboard format.

The dashboard not only articulates finance performance, but also assesses performance and risks in the legal, regulatory, social and political environments.

Increasing volumes of data, as well as advances in analytical tools and capabilities, have transformed how organizations generate insight.

A way forward:
rich data combined with smart technology powering new governance era

The trusted organizations of the future will likely have a very different approach to reporting and governance.
By combining increasing volumes of data with rapid technological advances, organizations can use analytics to transform their approach.

Their reporting teams should be able to provide rich, multidimensional data in one place, and use sophisticated analytics tools and other technology advances to deliver the reporting and business insights that are essential to giving stakeholders visibility into the business. Board members will likely be able to tap into real-time, forward-looking data that will help them to fulfill their oversight role and reinforce the integrity of the organization.

Realizing this future requires finance leaders and board members to consider three critical action areas:

1. Managing finance and reporting data as a strategic asset.
2. Shifting the finance mindset to embrace technology innovation.
3. Challenging traditional governance and board structures.

Managing finance and reporting data as a strategic asset

Organizations suffer from information overload. One critical step is therefore to catalog the most critical and valuable reporting data, where it is stored, and how it is stored. This can help organizations to focus their information governance efforts on where it matters most.

Data regulations continue to emerge and change as a result of political developments, and it is a challenge for finance leaders to understand whether their practices for reporting data are compliant with the applicable laws. By focusing on key data, businesses can evaluate their information governance program's compliance with global regulations and, if necessary, refine their approach so that they have the controls in place to improve compliance.

Shifting the finance mindset to embrace technology innovation

Innovative technologies – cloud, AI, RPA – can allow finance to provide forward-looking insights. However, these sorts of new approaches can run up against significant cultural and mindset barriers.

For progress to be made, finance teams should actively embrace new data techniques and technology, which means they should adopt a willingness to learn and experiment. Finance leaders can organize technology strategy workshops with IT to help their core team get up to speed with the latest digital developments, or create centers of excellence where finance and IT staff work together closely to understand how new technologies can solve finance challenges.

Challenging traditional governance and board structures

In an era of rapid change, organizations should challenge traditional governance and board structures to assess whether they are fit to provide effective oversight.

In terms of board composition, for example, board leaders should question which member profiles offer the most value. For example, would thematic expertise – such as strategic or technological – be important to the company, or perhaps it would benefit from the fresh perspective of somebody from a different industry?

Organizations should also question whether boards are using their time effectively, and whether the time spent on traditional topic areas can be re-allocated to new issues and strategic themes.

Comparison of responses (agreeing with the following statements)

	A disrupted corporate reporting environment.			Preparing financial statements.				
	Uncertainty about the risk of using new technologies to transform reporting such as cloud computing, is affecting reporting effectiveness	The need to align reporting with ever-changing accounting standards is affecting reporting effectiveness	The need to align with the complexity of local and international compliance is affecting reporting compliance	Managing data security and privacy is a data challenge of today's reporting environment	Implementing a data governance model to actively manage data flows based upon differing privacy laws is challenging	A lack of integration between IT systems is a significant systems challenge	Concern over data security and compliance risks with cloud computing technologies is a barrier to implementing new technologies or tools	Planned increase investment in new technology is more than 6% over the next two years
Global	65%	72%	71%	56%	85%	53%	49%	63%
Australia	63%	61%	78%	59%	85%	59%	56%	59%
Belgium	59%	54%	51%	37%	76%	34%	46%	44%
Brazil	78%	88%	80%	48%	93%	68%	40%	85%
Canada	68%	76%	68%	51%	83%	59%	49%	59%
China	82%	88%	80%	65%	94%	63%	55%	61%
Denmark	73%	60%	75%	48%	78%	33%	43%	68%
France	55%	80%	65%	53%	78%	40%	35%	48%
Germany	65%	70%	73%	55%	75%	40%	38%	58%
Hong Kong, SAR	65%	58%	70%	60%	93%	53%	45%	65%
India	79%	74%	86%	69%	86%	48%	50%	93%
Italy	78%	73%	80%	68%	80%	60%	65%	60%
Japan	63%	65%	68%	60%	75%	60%	53%	50%
MENA	49%	66%	51%	46%	70%	80%	20%	100%
Mexico	88%	90%	83%	40%	83%	60%	55%	73%
Netherlands	58%	73%	55%	55%	93%	55%	45%	53%
Norway	50%	58%	55%	58%	90%	50%	48%	70%
Poland	54%	73%	78%	51%	90%	39%	63%	59%
Russia	44%	54%	49%	51%	93%	49%	29%	63%
Singapore	59%	80%	88%	61%	90%	63%	63%	49%
South Africa	68%	78%	80%	68%	88%	63%	48%	73%
South Korea	78%	88%	83%	70%	78%	68%	50%	75%
Spain	73%	78%	78%	68%	95%	58%	58%	73%
Sweden	45%	60%	53%	50%	85%	45%	38%	35%
UK	68%	65%	63%	55%	78%	48%	48%	65%
US	83%	85%	88%	63%	93%	55%	58%	75%

Audit committees and supervisory boards.

	Audit committee members will need to develop new competencies	Audit committee members will need to build up their understanding of analytics' role in risk management	Audit committees are asking for more insight and information regarding compliance and control approaches for data protection and privacy laws	Audit committees are asking for more insight and information regarding risk assessments of potential changes to the regulatory environment	Finance functions use data and analytics to provide automated alerts to audit committees and boards of any governance, risk and compliance issues in the business	Audit committees and boards are putting a much stronger focus on corporate culture and its impact on compliance and fraud prevention
Global	64%	58%	42%	42%	85%	82%
Australia	71%	63%	27%	41%	83%	85%
Belgium	44%	37%	37%	39%	80%	68%
Brazil	63%	75%	35%	28%	88%	88%
Canada	63%	59%	49%	51%	93%	83%
China	76%	65%	33%	51%	94%	90%
Denmark	50%	40%	25%	33%	85%	83%
France	65%	60%	33%	45%	80%	78%
Germany	65%	65%	35%	45%	85%	80%
Hong Kong, SAR	65%	63%	45%	53%	95%	90%
India	81%	62%	55%	57%	83%	88%
Italy	68%	63%	58%	50%	85%	90%
Japan	65%	63%	50%	30%	75%	78%
MENA	37%	44%	60%	60%	90%	90%
Mexico	53%	60%	53%	38%	88%	88%
Netherlands	63%	68%	38%	43%	65%	78%
Norway	80%	63%	28%	30%	75%	78%
Poland	76%	61%	44%	39%	85%	78%
Russia	53%	50%	32%	34%	80%	71%
Singapore	68%	73%	61%	44%	95%	93%
South Africa	45%	50%	55%	53%	85%	83%
South Korea	65%	40%	45%	43%	83%	75%
Spain	80%	54%	53%	43%	88%	83%
Sweden	63%	68%	38%	40%	78%	75%
UK	75%	55%	40%	30%	93%	90%
US	68%	58%	43%	43%	95%	90%

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