

About the research

More than 1,000 CFOs or financial controllers of large organizations were surveyed to understand the challenges they face in corporate reporting. The research was conducted by Longitude on behalf of EY Global Financial Accounting Advisory Services (FAAS).

Over one-third of respondents' organizations – 35% – have revenues in excess of US\$5b a year, and 12% in excess of US\$10b a year. Just under half of the respondents (49%) were from the CFO community, with around one in five (19%) being group CFOs, alongside divisional and regional CFOs. The remaining 51% were finance directors, financial controllers (group, divisional or regional) or 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 represented, with 55% publicly held or listed and 45% privately owned.

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

André Besson

Head of Financial Reporting Guidelines, Nestlé

Vince Ciccolini

SVP, Chief Accounting Officer and Deputy CFO, Brightstar Corp.

Albert Hasselmeyer

Senior Vice President, Group Accounting and Reporting, BASF

Sue Hohenleitner

Vice President of Finance, Acquisition & Divestiture Operations, Johnson & Johnson

Jerry Lemon

Chief Accounting Officer, Quanta Services

Mathieu Rieder

Head of Group Financial Reporting, Nestlé

Isaac Tucker

Chief Product Officer, Blackline

Dana Bober

EY Americas FAAS Leader

Joon Arn Chiang

EY Asia-Pacific FAAS Leader

Karsten Füser

EY Global and EY EMEIA FAAS Markets Leader

Yuichiro Munakata

EY Japan FAAS Leader

Ben Taylor

EY UK&I FAAS Leader

Peter Wollmert

EY Global and EY EMEIA FAAS Leader

Contents

Foreword	3
Executive summary	4
1. Challenging the corporate reporting system to achieve value-driven reporting	6
2. Making the most of artificial intelligence and smart technologies	14
3. Transforming the finance workforce and overcoming cultural barriers	22
The way forward	28

EY Global FAAS would like to thank everyone who contributed their insights and knowledge to this report

Foreword

Finance and reporting leaders have the opportunity to drive their organizations into a new age of reporting transparency.

Corporate reporting can give capital market stakeholders, such as investors and analysts, a more complete picture that provides additional insight into performance and the organization's ability to create long-term value. And it can help rebuild trust levels that have remained low since the global financial crisis, and continue to be so in the wake of failing corporate ethics and other controversies that have made unwelcome front-page news.

But many organizations are failing to seize these opportunities. There is still a significant disconnect between current reporting and the drivers of long-term value. Too often, reporting fails to capture information on intangible assets as drivers of performance. And many organizations, rather than exploiting all the financial and nonfinancial data at their disposal, are simply overwhelmed by its variety and volume, and the speed at which they are accumulating it.

This EY research has been conducted annually since 2014. In earlier studies, finance leaders were focused on connected reporting, finance talent, finance operating model transformation and the need to rethink traditional corporate governance models.¹ Today, organizations of all sizes, both public and privately owned, have an urgent need to develop reporting transparency in a way that builds trust and helps explain how they are creating long-term value. In other words, finance should be bold enough to challenge the corporate reporting system. To do that, organizations have to be able to utilize the volumes of data at their disposal and turn it into a strategic asset. Finance teams should rethink their approach to a range of intelligent technologies, including artificial intelligence (AI), build a different talent profile and boost the skill sets of their existing workforce.

With finance leaders being bold and creative in their approach to technology and talent, corporate reporting can play a central role in rebuilding trust between corporates and their stakeholders by telling a broader performance story and supporting long-term value creation in a volatile world.

Peter Wollmert

EY Global and EMEIA FAAS Leader

Teles Whent

^{1.} Connected reporting: responding to complexity and rising stakeholder demands, EYGM Limited, 2014; Are you prepared for corporate reporting's perfect storm? EYGM Limited, 2015; How can reporting catch up with an accelerating world? EYGM Limited, 2016. Can innovative corporate reporting build trust in a volatile world? FYGM Limited 2017

Executive summary

1. Challenging the corporate reporting system to achieve value-driven reporting

Reporting transparency is critical. Capital market stakeholders want insight into what drives long-term enterprise value; organizations should give it to them. Transparency will also play a central role in rebuilding trust levels, which have still not fully recovered from the damage they incurred during the global financial crisis and from the publicity surrounding a number of corporate controversies. How can finance teams rebuild trust and give multiple stakeholders the information they demand? First, they should account for and explain organizational performance much more clearly and coherently if they are to support long-term value creation. Second, they should manage nonfinancial information with the same rigor and assurance as they manage financial information.

2. Making the most of artificial intelligence and smart technologies

With increases in computer-processing power, ever-growing connectivity, and the use of the cloud and its storage capacity, organizations and their finance teams have access to more data than ever before. But many are simply overwhelmed by the volume and variety of data they can now access. To turn it into a strategic asset and stay true to their transparency ambitions, organizations should explore the rapid technological advances in AI, automation and blockchain technologies. However, they must not seize those opportunities at the expense of standards and trust.

3. Transforming the finance workforce and overcoming cultural barriers

To exploit that huge amount of data, finance teams may not only need new technology, but also a different talent profile and skill sets in the finance team. Finance leaders should seek to overcome cultural barriers and entrenched processes. The capabilities they may require range from strategic awareness of new technologies, such as AI, to experience in disciplines such as data science and advanced statistics. This means challenging conventions about finance talent. It also means getting creative about the people and profiles they require, and about the way they approach hiring, talent development and resourcing.

The way forward

Trust can take a lifetime to build and seconds to lose. Rebuilding it in business depends on many factors, but reporting plays a significant role. Reporting teams should be able to utilize the rich, multidimensional data they now have at their disposal. Using technological advances and sophisticated skills, they will be able to provide the reporting insights that give stakeholders visibility into the business and support long-term value.

To move forward, three actions are critical. First, reporting leaders should understand how their approach to reporting and transparency measures up against their peers'. Second, they should create a compelling but pragmatic vision for finance to exploit new technologies such as AI. Third, they should manage the difficult tension between mitigating data as a risk and exploiting it as an opportunity; this means establishing the right culture for reporting data – one that is underpinned by a clear data strategy, code of conduct and data governance framework.



Figure 1. Value-driven reporting: the route to transparency, trust and long-term value

Value-driven reporting exploits financial and nonfinancial data to increase transparency, and it is essential to help rebuild trust and clearly explain how organizations create long-term value and market confidence. Finance leaders should be bold – challenging the corporate reporting system, utilizing intelligent systems, and transforming skills and capabilities.



finance skills.

skills is necessary.

talent are needed.

63%



Close to two-thirds surveyed say resistance and cultural barriers within their finance teams are barriers to digital innovation.

1st vs. 5th



Finance leaders surveyed say that analytical skills are the key requirement for tomorrow's successful finance executive; traditional accounting skills are ranked fifth.

76%



About three-quarters say that finance should widen its recruitment net to find people with nontraditional backgrounds.





Companies and capital markets depend on trusted and relevant corporate reporting. It underpins companies' reputations and builds market confidence in the actions of company leaders.

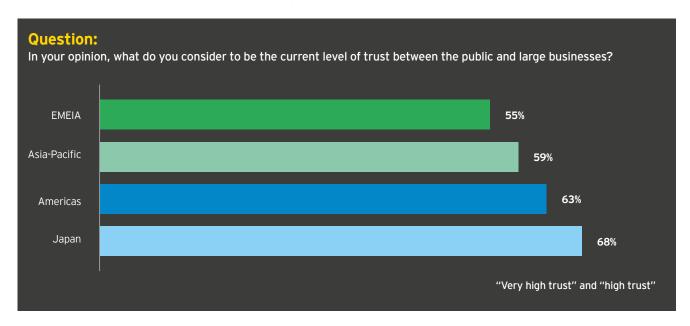
Now, however, the effectiveness of corporate reporting is threatened on two fronts. The first is a widening trust gap between business and society. The 2017 Edelman Trust Barometer, for example, showed that business was distrusted in 13 of 28 countries.²

This EY FAAS research found that only 58% of finance leaders are prepared to say that businesses are highly trusted. It might be expected that corporate finance leaders would be relatively positive about trust in business, but as chart 1 shows, a lukewarm response is a common pattern across many regions of the world. For example, only 55% of respondents in EMEIA are prepared to say that businesses enjoy either "very high trust" (12%) or "high trust" (43%).

^{2.} Matthew Harrington, "Survey: People's Trust Has Declined in Business, Media, Government, and NGOs", Harvard Business Review, 16 January 2017.

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

Chart 1. Finance leaders are far from bullish about public trust in businesses



For Vince Ciccolini, SVP, Chief Accounting Officer and Deputy CFO, Brightstar Corp. – a provider of business-to-business services for mobile device manufacturers, operators, retailers and enterprises – accounting principles play a significant part in driving the transparency that is required for trust. "When I think about accounting principles and where they were when I started my career, while they may be complex, overall they're striving for more transparency," he says. "There's a lot more transparency today about how companies operate, where they're spending their money, the cash flows and how things are operating. I do believe there's more integrity in the system."

Peter Wollmert, EY Global and EMEIA FAAS Leader, points out that the weak public trust levels are reinforced by the disconnect between the corporates' reporting agenda and the public's agenda. "Reporting should get closer to the expectation of the public," he says. "If you look at their agenda, it includes topics like human rights and diversity. EY professionals, therefore, have a responsibility to provide some transparency on these topics. We should do more work on providing forward-looking reporting that also goes beyond pure financial reporting."

58%

of respondents are prepared to say that businesses enjoy either "very high trust" or "high trust".

As much as trust issues are concerned, there is also a growing disconnect between what corporate reporting provides and what stakeholders want. Too often, reporting fails to capture information on intangible assets – corporate culture, for instance – as drivers of organizational performance. This can mean that investors are denied the opportunity to fully understand the business's future potential for long-term value creation.

1. Challenging the corporate reporting system to achieve value-driven reporting

Reporting on culture as an intangible asset

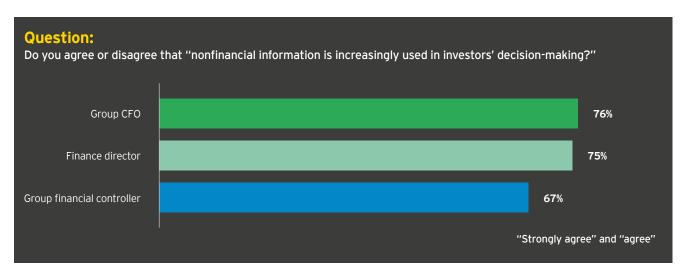
Culture is a critical intangible asset that plays a central role in reducing risk and delivering long-term, sustainable growth.

Critical stakeholders – from regulators to investors – should have confidence that organizational culture is fit for purpose. Recent EY research in the UK, Is your board yet to realize the true value of culture?, found that culture is vital to overall strategy and performance; boards still need to take more responsibility for defining, shaping and monitoring culture; and investors need more information on organizational culture to support long-term performance measurement.3

The research shows that finance leaders know that investors now expect reporting on a bigger picture. Just under three-quarters (72%) of finance leaders say that nonfinancial information is increasingly used in investors' decision-making, and over three-quarters of group CFOs emphasize its importance (see chart 2). If investors do not get the information they want from corporate reporting, they will look for it elsewhere and reach conclusions that are out of the company's control.

To rebuild trust and offer stakeholders insight into an organization's plans to create long-term value, finance teams should focus on two priorities: first, account for and explain organizational performance much more clearly and coherently; second, manage nonfinancial information with the same rigor and assurance as managing financial information.

Chart 2. Finance leaders see nonfinancial information as key to making an investor connection



^{3.} Is your board yet to realize the trust value of culture? Ernst & Young LLP, 2016.

Two priorities for finance teams

Priority one: Account for and explain organizational performance much more clearly and coherently

Companies have made significant progress in their reporting of financial and nonfinancial information. They now report against key performance indicators (KPIs) – economic; strategic; and environmental, social and governance (ESG). According to this EY research, the most common KPIs include "treatment of employees" and "customer loyalty" or "net promoter score."

They are also communicating nonfinancial information in a variety of ways. These are (placed in order according to this research):

- 1. Company-defined report that integrates financial and nonfinancial information
- 2. Integrated report that follows the International Integrated Reporting Council's (IIRC's) International Integrated Reporting Framework
- 3. Specific section within the annual report
- 4. Stand-alone corporate social responsibility report
- 5. Stand-alone sustainability report

China focuses on the net promoter score

Overall, 43% of finance respondents say that they report on customer loyalty KPIs or net promoter scores. But, in China, 79% report on this measure – the highest proportion of all the countries surveyed in terms of this customer-facing KPI. This could reflect the importance of e-commerce in China; in 2016, online sales in China hit US\$366b - almost as much as in the US and the UK combined.⁴ Targeted marketing online means consumers are less loyal to specific brands; so the ability to build customer loyalty becomes a crucial part of growing value in the long term.

However, despite this significant progress, more should be done to challenge reporting. There is a tendency to report the wrong things – measuring what is easy rather than what stakeholders want to know.

This is particularly true of intangible – nonfinancial – assets. Statistics show that, in the 1970s, about 80% of Standard & Poor's 500 market value was accounted for by tangible assets on the balance sheet; today, it is less than 20%.5 This EY research bears this out: close to three-quarters of finance leaders overall – 73% – say "our performance on nonfinancial KPIs has a significant impact on intangible assets." This is a sentiment shared across the finance function, with 75% of group CFOs and 70% of group financial controllers agreeing.

For executives to address these shortcomings, they should account for and explain organizational performance much more clearly and coherently if they are to support long-term value creation. For Sue Hohenleitner, Vice President of Finance, Acquisition & Divestiture Operations,

^{4. &}quot;Online retail is booming in China," The Economist, 26 October 2017.

^{5.} Felice Persico, "Isn't it time the intangible became tangible when measuring long-term value?," EY website, ey.com/en_gl/trust/isn_t-it-time-the-intangiblebecame-tangible-when-measuring-long, 28 March 2018.

Reporting should explain organizational performance more clearly and coherently.

Johnson & Johnson, delivering reporting that supports longterm value creation means understanding what stakeholders need, without simply trying to satisfy every request for information. "I think, in some cases, the ability to communicate long-term value is missing in traditional corporate reporting because of its historical emphasis," she says. "Corporates need to make it easier for investors and other stakeholders to garner what the long-term strategy looks like. This means having your finger on the pulse of what investors are asking for related to your strategic direction, and communicating that proactively, clearly and concisely."

73%

say "our performance on nonfinancial KPIs has a significant impact on intangible assets."

Reporting on shared value at Nestlé helps build trust

Nestlé's Creating Shared Value (CSV) philosophy, which is built on the belief that the company will be successful in the long-term by creating value for both its shareholders and for society as a whole, underpins how the world's largest food and beverage company does business and communicates with stakeholders. For example, its 2017 annual report includes both financial statements and its achievements against creating shared value.

For André Besson, Head of Financial Reporting Guidelines, Nestlé, the company's approach reflects the need to report on broader value drivers as organizations look to build trust and explain their value creation models. "To cut a long story short, I'm not sure you will be trusted as a company today with financial reporting only, even if it is comprehensive and complete," he says. "You need more than that. You need to be more outward- and forward-looking. Otherwise, people will say 'okay, fine, you've explained your past, but what about your environment? What about your social responsibility? What about the sustainability of your business model?'."

For his colleague, Mathieu Rieder, Head of Group Financial Reporting, this requires more and more collaboration between finance and other teams to avoid a disconnect between nonfinancial and financial reporting. "You need to understand the pertinence of nonfinancial key performance indicators and any links with financials," he says. "It is important to ensure coherence between information reported in the context of CSV and information forming part of financial reporting."

Collaboration is also about seeing where nonfinancial reporting can borrow from the rigor and control that applies to financial reporting. Mathieu adds, "Financial reporting teams have strong competence in ensuring integrity and completedness of reported figures and we see increasing interest from the CSV area to leverage on that competence, the tools and processes used."

1. Challenging the corporate reporting system to achieve value-driven reporting

The long-term value approach demands new frameworks that communicate the value of strategic assets, provide information that multiple stakeholders demand, and show how organizations are creating value over the long term. The Embankment Project⁶ is a step toward this kind of framework.

The Embankment Project

As businesses respond to calls to demonstrate their contribution to inclusive long-term value creation that benefits all of society, the Coalition for Inclusive Capitalism and EY have brought together CEOs from more than 30 leading organizations, representing more than US\$30t of assets under management, to work on a way to more effectively articulate how they create value for stakeholders and reduce the pressure to make short-term trade-offs.

The initiative, called the Embankment Project for Inclusive Capitalism, is developing a measurable, comparable and meaningful way for companies to better articulate how they create long-term value for their stakeholders.

The project involves corporations from across the consumer products, health services and the industrials sectors, in addition to investment and asset management organizations. Over the course of the project, participants are working together to identify a set of outcome metrics and developing a framework that helps companies articulate how their strategy will deliver long-term value.

For more details please visit: www.inc-cap.com/embankment-project/

Priority two: Manage nonfinancial information with the same rigor and assurance as managing financial information

The increasing focus on nonfinancial information means that stakeholders are going to challenge reporting more.

Management and boards should be convinced that the information is useful and relevant; regulators are going to want to know that it is accurate and compliant. If all reporting information - whether it is financial or nonfinancial - is not investment-grade, trust will suffer.

62%

of respondents say that corporate reporting enjoys high levels of investor trust, but this increases to 83% among those who have their nonfinancial information audited.

^{6. &}quot;Global business leaders and investors unite to develop framework that measures long-term value creation for all stakeholders," EY website, ey.com/gl/ en/newsroom/news-releases/news-ey-global-business-leaders-and-investors-unite-to-develop-framework-that-measures-long-term-value-creation-for-allstakeholders. 28 June 2017.

1. Challenging the corporate reporting system to achieve value-driven reporting

Meeting investors' needs with nonfinancial reporting

Research from EY's Climate Change and Sustainability Services team (CCaSS) shows that much of the impetus for improved and better integrated nonfinancial reporting is coming from the institutional investor community.⁷

Global policy debates, new regulatory requirements and more stringent supply chain practices play a part, but the collective voice of the investor continues to be among the clearest. In the CCaSS research, for instance, most (96%) of investors said that nonfinancial performance had played a pivotal role "frequently" or "occasionally" in their investment decisions in the past 12 months.

Independent assurance of information, either mandated or voluntary, can play a critical role. EY research finds that companies that have their nonfinancial information independently verified are more likely to be confident that their corporate reporting is trusted. Overall, 62% of respondents say that corporate reporting enjoys high levels of investor trust, but this increases to 83% among those who have their nonfinancial information audited.

BASF: A stakeholder-driven approach to reporting

Albert Hasselmeyer, Senior Vice President, Group Accounting and Reporting, BASF – the chemicals giant that delivered sales of €64.5b in 2017 – outlines how a close understanding of stakeholder needs drives their integrated reporting approach. "The first thing is to establish what we should include in our report: the information that is relevant to our stakeholders," he explains. "Therefore, at BASF, we consider the feedback from external stakeholders and people inside the organization address in our report based on their experience. What are the really relevant and material items that we should address in our report? You want to cover what matters to stakeholders and you want to give them the important information that they need."

Executive action area

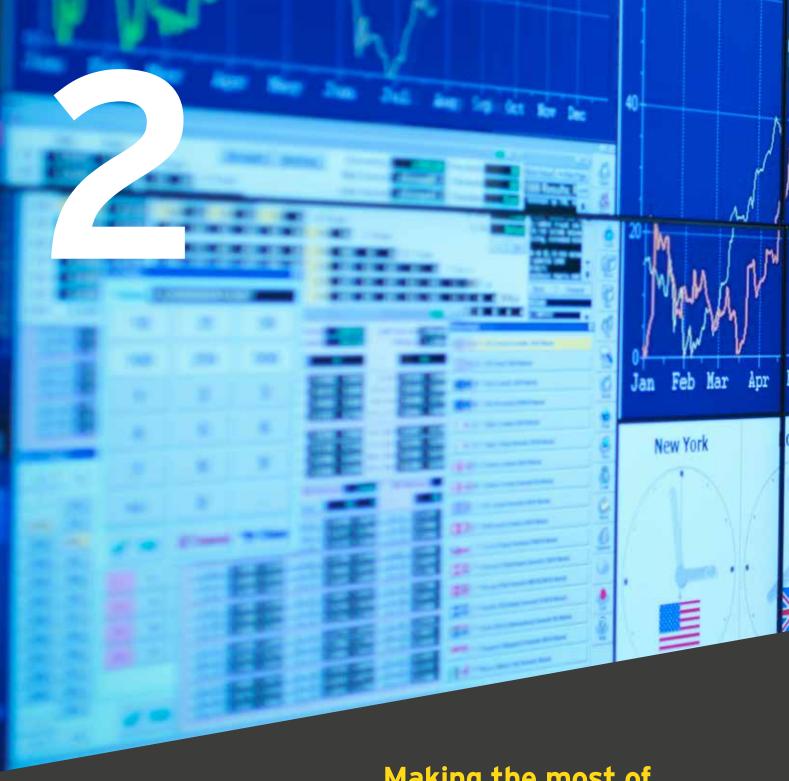
A stakeholder-driven way to transform reporting effectiveness

To seize the opportunity to tell your organization's performance story differently, you should manage your critical stakeholders carefully.

First, engage your external stakeholders. This means involving a broad cross-section of your stakeholders in determining what aspects of your business are most important – and keep them informed on progress.

Second, engage your board. Investors will expect the board to have signed off on your strategy and disclosures. Engaging the board early in the process can help you to meet your governance obligations and reduce the chance of going in the wrong direction.

^{7.} Does your nonfinancial reporting tell your value creation story?, EY, 2018.



Making the most of artificial intelligence and smart technologies



Organizations and their finance teams have more data than ever before thanks to increases in computer-processing power, ever-growing connectivity, and the cloud and its massive storage capacity.

However, many finance and reporting teams are simply overwhelmed by the volume and variety of that data. In this EY research, about half of the finance leaders (49%) say they "spend more time gathering and processing data than they do in analyzing it" (see chart 3).

Chart 3. Close to half of finance leaders spend more time in collecting data than in generating insight



Many finance and reporting teams are overwhelmed by the volume and variety of data.

Dana Bober, EY Americas FAAS Leader, believes that the time finance teams spend on simply gathering and validating financial data is one reason that some companies have made less progress on nonfinancial reporting and have been purely focused on producing compliant financial information. "While more and more organizations are looking at data as a strategic asset, there are still many that unfortunately have further to go before they can execute on that strategy," she says. "The struggle with data has not been overcome by many. In fact, in many organizations, they are still focused on cleaning up the data. They have multiple systems – particularly if they have grown over time through acquisitions – and never fully integrated, with different financial information sitting in different areas. As a result, many folks are still so focused on just their regular financial close process."

At Quanta Services – an infrastructure solutions provider for the electric power, oil and gas and telecommunication industries – the drive to turn data into insight is an ongoing effort and challenge. As Jerry Lemon, Chief Accounting Officer, explains, that reflects the company's operational structure and continuing acquisitive growth focus. "We recently went live on a significantly enhanced consolidation 49%

of the finance leaders say they "spend more time gathering and processing data than they do in analyzing it."

and reporting system - an integration of both actuals and forecast data as well as detailed job data," he explains. "We're now in a better position to mine the data and capture insights. However, the ongoing integration of acquired businesses remains a challenge and requires continued investment in data infrastructure."

To turn data into truly value-driven reporting, finance teams should focus on two priorities: first, exploit rapid technological advances in automation, AI and blockchain; second, build trust in data analytics.

Japanese corporate reporting: upgrading legacy IT is the major focus

When finance leaders were asked about their top priorities for making corporate reporting more effective in the future, Japanese respondents made "upgrading finance's legacy IT systems" their number-one priority. Yuichiro Munakata, EY Japan FAAS Leader, outlines how a number of forces are shaping this focus on legacy IT. "The Japanese EY clients are more focused on upgrading legacy IT systems than emerging technologies. Japan is seeing a drop in the workforce, but, at the same time, Japanese labor laws compel companies to maintain their people's employment. To maintain employment, existing tasks and jobs are not fully automated and simplified."

"EY teams do see interest in automation. In financial institutions, this is spreading to finance and accounting because of internal control considerations. Overall, Japanese companies are interested in robotic process automation because it is relatively easy to implement and has initial costs that are not seen as prohibitive."

Two priorities for finance teams

Priority one: Exploit rapid technological advances in automation, artificial intelligence and blockchain

Automation: giving finance teams freedom to focus on insight generation

The most agile finance and reporting teams are using automation to drive new levels of operational agility:

- They are advanced in using robotic process automation (RPA) to drive new levels of efficiency. And they are using rules-based robotics technologies to automate high-volume transactional finance processes.
- They are already exploring the next frontier in automation intelligent process automation, which combines RPA with Al such as machine learning. These technologies learn over time as they are exposed to more data, allowing finance teams to target high-value finance responsibilities. Lease accounting changes are one example: pilots have showed that AI tools can review about 70% to 80% of a simple lease's contents. As these tools improve, they will move on to reading, managing and analyzing complex contracts and data.8 Other intelligent technologies that could work include speech recognition, natural language processing, biometrics and chatbots.

72%

say that AI will have a significant impact on the way finance drives data-driven insight, and that AI will be the critical technology for the finance function in the future.

Isaac Tucker, Chief Product Officer, Blackline - which provides cloud-based solutions that automate finance and accounting operations - points out that significant process re-engineering is critical to driving value from automation. "When implementing one of these solutions, a lot of companies end up re-architecting the original process," he says. "I think that's the value for robotic process automation. Quite frankly, if companies simply take a process that evolved in the 1970s on sheets of paper and add robotics to it, it's a short-term gain. Long-term, they're going to have to bite the bullet. They're going to have to re-architect at some point."

For Karsten Füser, EY Global and EMEIA FAAS Markets Leader, automation is critical for giving busy finance teams the space to develop the reporting insights that create transparency and trust. "By automating key elements of delivery - both transactional as well as more complex tasks you can free up your finance teams to focus on data-driven reporting insight. In this way, data becomes a strategic asset for finance, with finance people able to add much more value and with reporting able to support long-term value creation."

^{8.} Al: Welcome to the machines, Reporting, EY Assurance insights hub, June 2017.

Intelligent process automation in finance and reporting: key questions for finance leaders

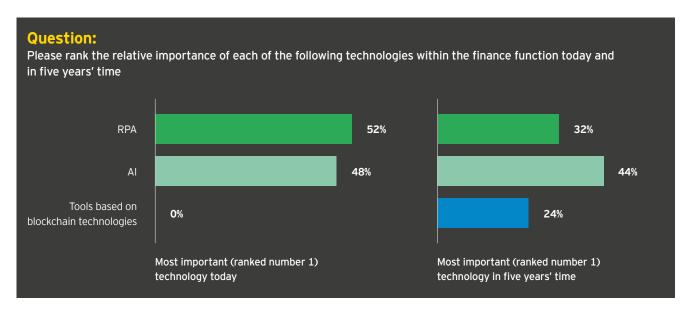
- ► Do we understand the benefits case for intelligent automation?
- ► Do we know which reporting processes to target?
- How will we manage data security and privacy risks?
- How will we find the talent required and upskill our existing people?
- ► How will we overcome any internal resistance to these technologies?
- Do we have a clear business case and adequate budget provision for a concerted effort?

Artificial intelligence: harnessing insight from data

Finance leaders can use AI to look for underlying patterns in data as well as machine learning to predict scenarios and improve outcomes.

Close to three-quarters of finance leaders in this research (72%) say that AI will have a significant impact on the way finance drives data-driven insight, and that AI will be the critical technology for the finance function in the future. Finance leaders were asked to rank the importance of three technologies - RPA, AI and blockchain-based tools. Although RPA came out on top for now, Al leads the list in five years' time (see chart 4).

Chart 4. Reporting's critical technologies: 2018 vs. 2023



2. Making the most of artificial intelligence and smart technologies

Do the right thing: artificial intelligence and ethics

Al is developing rapidly, and it is critical that finance leaders keep up. This means making informed decisions now about where the technology can drive most value in finance and reporting. Only then can finance leaders plot out their transformation and lay the groundwork for strong collaboration between finance and IT.

But there are ethical issues. In finance and reporting, it is not enough to ask whether systems are doing things right. You should also ask whether systems are doing the right things. This is especially important with a fast-moving technology, such as AI, because rules and regulations lag behind technology, and have not yet been proven to adequately assure and address risks.

One approach to developing ethical standards for these tools is to ask the stakeholders who will be impacted by the technology to look at it from their perspective. And the design of the system should reflect the importance of transparency around how the reporting system has made its decisions.

However, finance leaders do not just have to think about how they use AI in their finance functions. They should also think about how stakeholders, such as investors, are using it to highlight corporate reporting.

Al allows investors to analyze corporate financial information in ways that were previously unthinkable. One large global investor, for instance, is reportedly using AI as the first reader of almost every piece of company information it assesses.9

This research shows that a number of finance leaders agree on the technology's potential. As chart 4 shows, close to one-quarter (24%) say that blockchain will be finance's most important technology in five years' time. Of course, a number of challenges will need to be overcome. For example, key stakeholders – from regulators to boards – would need to agree on and implement the required regulatory environment.

Blockchain: disrupting the future of reporting as we know it?

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. Some commentators, therefore, expect the technology to become the industry standard for reporting and accounting, replacing existing back-end IT and traditional reporting practices. If blockchain is used to automatically consolidate accounting records, then reporting teams can spend less time on crosschecking and aggregation, and more time on analyzing data than can be trusted.

24%

say that blockchain will be finance's most important technology in five years' time.

^{9. &}quot;Information overload?," Reporting, EYGM Limited, November 2017.

Finance leaders have concerns about data risks and data security.

Priority two: Build trust in your data analytics

Finance leaders are focusing on turning data into reporting insight, but they have to negotiate a difficult balancing act: driving innovation in how they use data without compromising standards and undermining trust.

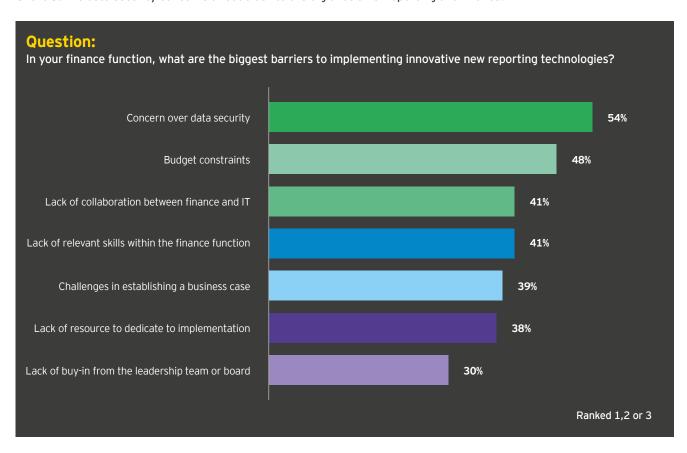
This research shows that concerns about data risk are at the top of finance leaders' minds: they say that "heightened data protection and privacy risk" is the number-one challenge facing corporate reporting today.

And concerns about data security are one of the most critical barriers to implementing new reporting technologies.

The top five challenges facing finance leaders are:

- 1. Heightening data protection and privacy risk
- 2. Meeting the pace of technology change
- 3. Increasing scrutiny and regulatory change
- 4. Increasing demand for real-time, forward-looking information
- 5. Meeting changing societal norms

Chart 5. Are data security concerns a roadblock to the digitization of reporting and finance?



2. Making the most of artificial intelligence and smart technologies

Trust in data: the corporate voice

There is already a large body of academic research and thinking on data ethics and governance, but there is a need to better understand the corporate perspective.

In the EY report Trust in data and why it matters, the teams surveyed more than 200 leading companies and carried out a quantitative analysis of the impact of data-related events on expected market return, linking trust in data to stock performance, and overall market sentiment.

While trust and data have always been linked, the research investigates how the digital era has given this link new prominence. On average, companies affected by hacks or data leaks experienced a decrease of 6% in their value over the subsequent 5 days, and 7% over a 10-day period.¹⁰

However, concerns about digital and data risks should not hold organizations back. To get to true value-driven reporting, finance teams should be able to embrace their data with confidence. This will require changes not only to technology and processes, but also to mindset, skills and governance.

For Ben Taylor, EY UK&I FAAS Leader, this also includes thinking about the ethical dimensions of the advanced technologies that are involved in data analytics, and then communicating the company's stance and approach.

"As artificial intelligence is embedded into a range of areas healthcare, legal decisions, financial investment – there will be artificial intelligence algorithms that will be making decisions on our behalf," he explains. "It's important that those companies that are embedding artificial intelligence start talking about how they are controlling it. This begins with knowing exactly where artificial intelligence is being used across the organization. The ethical dimension is a fast-emerging field and it's likely we will see some more public scandals before we're all properly educated on what the risks are."

Executive action area

Defining an approach to finance and reporting data governance

Managing concerns over data protection and privacy risk can seem overwhelming – there is so much data available and it is hugely varied.

For finance leaders, the best response is to focus in on - and catalog - their most valuable reporting data. If they understand what data is the most important, and where and how it is stored, organizations can direct their information governance efforts to where they matter the most.

That understanding will also allow them to stay on top of fast-changing data regulations, such as the European Union's General Data Protection Regulation (GDPR), which came into effect in May 2018. Backed by fines of up to €20m or 4% of global revenue (whichever is higher), GDPR gives individuals new, expanded rights over their personal data, and heightens the responsibilities and liabilities of controllers and processors – regardless of their geographical location.

^{10.} Quantitative analysis of the market data and impact of adverse data events, EY, September 2017.



Transforming the finance workforce and overcoming cultural barriers



Value-driven reporting does not just demand that finance teams adopt new technology - they also require a different talent profile and skill sets.

The finance function will benefit from team members with a range of new capabilities beyond traditional finance and accounting skills, including strategic awareness of new technologies, such as AI, and knowledge in disciplines such as data science and advanced statistics.

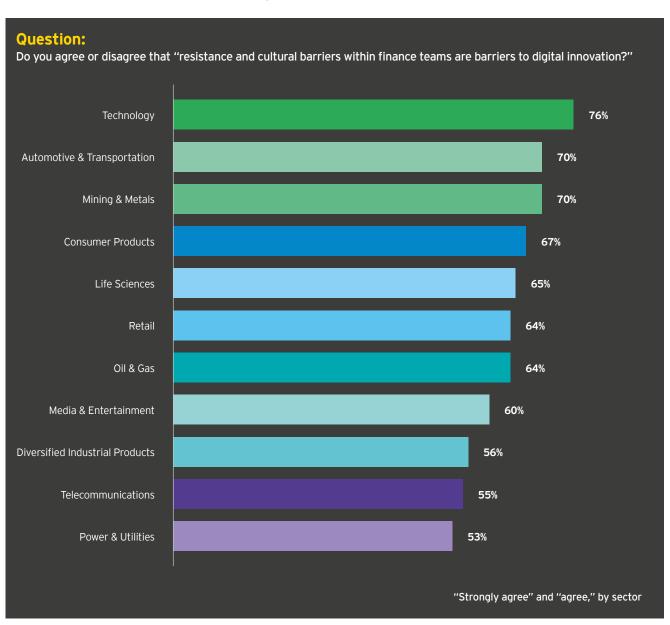
Those who can help the team understand and measure the interdependencies between nonfinancial and financial information will prove valuable. That skill requires a grasp of the nuances of nonfinancial information management and understand the interdependencies among the organization's different types of capital.

Finance leaders know the function's talent profile needs rebooting. A significant majority (79%) of the CFO respondents to this research say there is an urgent need for finance to recruit new skills.

However, driving a change in approach can be very difficult, with an entrenched culture and resistance to change acting as a brake on progress. In this research, 63% of finance leaders say that "resistance and cultural barriers within finance teams are barriers to digital innovation." In technology companies which have to constantly drive innovation to survive in an industry where the technology agenda is constantly changing - senior finance leaders are particularly concerned about their teams' ability to embrace digital ways of working with the speed that the organization as a whole demands (see chart 6).

3. Transforming the finance workforce and overcoming cultural barriers

Chart 6. Cultural barriers and resistance to change are an obstacle across sectors



72%

of all finance leader respondents say that AI experts will be critical to driving innovation in finance and reporting over the next two years.

For Joon Arn Chiang, EY Asia-Pacific FAAS Leader, finance leaders need to focus hard on culture, as new technology investments will not lead to significant change if negative behaviors and culture have not been addressed. "If a company has a negative culture, no amount of artificial intelligence or "cool technology" is going to help you," he says. "Infusing technology will only work if the environment is enabling. If a company is going to make significant investments in technology, they should take a hard look at themselves first, which means asking yourself some hard questions. Is my organization ready to accept this technology? Is my organization willing to use this technology and make decisions based on the output of this technology? If the answer is "no" to any of those questions, you need to think hard about the investment."

To overcome resistance and accelerate the changes that should happen in the finance workforce, organizations should focus on two priorities: first, get creative about the people and profiles they need; second, approach hiring, talent development and resourcing more innovatively.

Two priorities for finance teams

Priority one: Get creative about people and profiles

Finance is starting to require people with new skills. This next generation should understand not just accounting and their industries, but also AI, blockchain and machine learning – as well as how these technologies work together.

Younger finance executives place higher priority on leading-edge capabilities such as RPA expertise

This EY research shows that while all respondents believe new areas of technology expertise will be critical to driving digital innovation, younger finance executives place more of a premium on this area. For example, for finance executives who are 39 years old or younger, over a quarter (27%) say roboticists will be "very important" to digital innovation in finance. For those who are 50 or more years old, this drops to 16%. It was found that younger finance executives are also more likely to feel that data scientists and statisticians will be very important when it comes to driving digital innovation. This perhaps reflects the fact that younger generations are very much aware of the impact of new technologies, and are more open to finance recruiting the expertise required to respond.

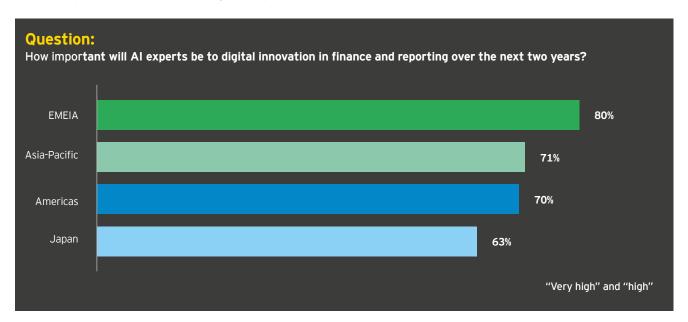
3. Transforming the finance workforce and overcoming cultural barriers

In this research, 72% of all finance leader respondents say that AI experts will be critical to driving innovation in finance and reporting over the next two years. As chart 7 shows, it is a priority across major regions.

Finance leaders should define the skills and capabilities they will require on the basis of their companies' strategy as well as the need to maintain or increase transparency and build long-term value.

Leading finance functions are auditing the existing capabilities of their teams to understand what gaps they face. This should include both hard skills required to exploit new technologies and data as well as soft interpersonal and strategic skills.

Chart 7. A premium on artificial intelligence expertise



Executive action area

Building a finance and reporting team with the right people and right skills

As they seek to redefine the future of finance talent, finance leaders should work closely with their counterparts in HR to rethink their talent management strategies – how they retain, engage and inspire high-caliber talent by providing stimulating experiences and greater mobility across different parts of the business. They will have to strike a balance between improving existing reporting teams and recruiting for in-demand capabilities such as data science. And they should establish a continuous, dynamic approach to learning – in the digital world, skill sets have a shorter shelf-life.

3. Transforming the finance workforce and overcoming cultural barriers

Tomorrow's finance competencies: managed services and the finance function operating model

As they look at what competencies they require to succeed in an increasingly disrupted future, finance leaders should consider their future operating model. Their organization's strategic priorities will change rapidly – finance and reporting must have the agility to change with them.

Flexible models, such as managed services, are one way to address this. Finance can use these models to access the right skills to deal with unexpected challenges, make the most of emerging opportunities and meet crunch points.

About three-quarters of respondents say that managed-services arrangements will be critical to meeting strategic priorities, with access to technology skills the key driver for this approach.

Finance leaders' top five reasons to use managed services are:

- To secure access to technology knowledge
- To reengineer finance processes
- To provide financial support to major strategic initiatives such as M&A
- To meet fast-changing regulatory and legal requirements

To cut costs

Priority two: Approach hiring, talent development and resourcing more innovatively

Many organizations understand that they require new skills and profiles, but they often fail to look for talent in different places, and do not use new tactics for developing their people. Too often they are stuck in traditional practices: they use the same methods that have been in place for years, and were used to recruit and develop themselves.

Finance should do more to challenge these entrenched approaches and views of what constitute finance capabilities. The automotive industry, for instance, has responded boldly to the challenge of digital disruption and connected cars. Some companies are even moving their business units closer to the talent they need such as areas around universities and digital hubs.

Finance leaders in this research recognize that they should be creative about how they source and develop people: over three-quarters (76%) say that finance should widen its recruitment net to find people with nontraditional backgrounds.

The way forward

Trust can take a lifetime to build and seconds to lose. While rebuilding it depends on many factors, reporting can play a vital role.

Reporting teams should be able to exploit the rich, multidimensional data they now have access to. Using technology advances and sophisticated skills, you may provide the reporting insights that give stakeholders visibility into the business and support long-term value.

For reporting to play this role, finance leaders should consider three critical actions:

- 1. Understand how your approach to reporting and transparency measures up against your peers'
- 2. Create a compelling but pragmatic vision for how finance could utilize new technologies
- 3. Manage the difficult tension between mitigating data as a risk and exploiting it as an opportunity

Understand how your approach to reporting and transparency measures up against your peers'

You should compare your approach to reporting against peers and leaders in this field. This can help stimulate your thinking about creating a structured framework for reporting long-term value to key stakeholders. You also should consider how they approach nonfinancial assurance so that external stakeholders and boards trust that information. You should also consider how to manage risk and seize opportunities to improve supporting processes and systems.

Create a compelling but pragmatic vision for how finance could utilize new technology advances

Over the coming years, intelligent systems are likely to play an increasing role in more reporting processes and tasks, transforming the ability of finance teams to drive insight from their data. To realize the potential of intelligent systems, you should act now to identify the reporting issues these technologies may solve and to set out how they could transform your approach. This can give finance both a compelling vision and a practical road map for change. This may also help you overcome organizational resistance and engage with key stakeholders such as supervisory boards and audit committees.

Manage the difficult tension between mitigating data as a risk and exploiting it as an opportunity

There is an important balance to strike between "data as a risk" and "data as an opportunity." You should drive data innovation while avoiding lapses in data security and threats to your customers' privacy. This means creating the right internal culture for data, with everyone following a clear data strategy underpinned by a code of conduct and data governance framework. And rather than seeing regulatory frameworks for data protection and privacy just as compliance exercises, you should consider reframing them as an opportunity to take a positive approach to data.



Comparison of responses (agreeing with the following statements)

Challenging the corporate reporting system to achieve value-driven reporting Making the most of artificial intelligence and smart technologies

	Businesses enjoy either "very high trust" or "high trust"	Our performance on nonfinancial KPIs has a significant impact on intangible assets, such as brand and reputation	Nonfinancial information is increasingly used in investors' decision-making	Our finance function is already making significant investments in artificial intelligence	Over the next two years artificial intelligence will have a significant impact on how finance drives data-driven insight	Artificial intelligence has the capability to fundamentally disrupt how finance and corporate reporting is conducted
Global	58%	73%	72%	58%	72%	64%
Australia	53%	80%	75%	58%	75%	70%
China (mainland)	80%	93%	83%	75%	85%	73%
Hong Kong	42%	67%	72%	49%	67%	51%
India	64%	88%	76%	64%	93%	83%
Japan	68%	63%	70%	48%	68%	33%
Singapore	61%	83%	76%	59%	80%	80%
South Korea	50%	60%	70%	48%	83%	65%
Saudi Arabia	78%	78%	52%	83%	61%	48%
South Africa	70%	78%	80%	58%	68%	80%
UAE	59%	71%	76%	76%	82%	88%
Belgium	46%	56%	63%	46%	44%	44%
France	55%	83%	85%	58%	65%	73%
Germany	63%	85%	68%	53%	65%	63%
Italy	63%	70%	83%	60%	58%	75%
Netherlands	45%	60%	58%	40%	45%	50%
Poland	46%	59%	71%	39%	66%	61%
Spain	78%	70%	80%	60%	80%	55%
UK	44%	75%	77%	73%	81%	83%
Russia	55%	73%	73%	58%	83%	78%
Denmark	45%	65%	78%	43%	68%	65%
Norway	41%	66%	54%	46%	44%	41%
Sweden	55%	73%	53%	58%	63%	55%
Canada	46%	68%	63%	59%	68%	56%
US	59%	82%	77%	75%	95%	82%
Brazil	75%	80%	83%	83%	85%	50%
Mexico	73%	73%	75%	70%	88%	73%

Transforming the finance workforce and overcoming cultural barriers

	Resistance and cultural barriers within finance teams are barriers to digital innovation	There's an urgency for finance to recruit new skills	Finance needs to widen its recruitment net to find people with non-traditional backgrounds
Global	63%	74%	76%
Australia	78%	75%	75%
China (mainland)	63%	80%	93%
Hong Kong	51%	70%	84%
India	83%	86%	86%
Japan	48%	75%	83%
Singapore	66%	90%	76%
South Korea	68%	68%	68%
Saudi Arabia	70%	83%	70%
South Africa	63%	85%	85%
UAE	71%	76%	88%
Belgium	59%	46%	56%
France	63%	78%	85%
Germany	58%	65%	73%
Italy	70%	75%	75%
Netherlands	55%	65%	53%
Poland	68%	61%	76%
Spain	78%	85%	80%
UK	63%	85%	77%
Russia	73%	93%	80%
Denmark	43%	50%	75%
Norway	49%	66%	56%
Sweden	48%	50%	68%
Canada	66%	78%	73%
US	73%	84%	84%
Brazil	53%	75%	80%
Mexico	70%	83%	75%

EY contacts

Global and Europe, Middle East, India and Africa

Peter Wollmert FAAS Leader peter.wollmert@de.ey.com +49 711 9881 15532

Karsten Füser

FAAS Markets Leader karsten.fueser@de.ey.com +49 711 9881 14497

Americas

Dana Bober FAAS Leader dana.lombardo-bober@ey.com +1 212 773 8670

Asia-Pacific

Joon Arn Chiang FAAS Leader joon-arn.chiang@sg.ey.com +65 6309 6997

Japan

Yuichiro Munakata FAAS Leader yuichiro.munakata@jp.ey.com +81 3 3503 1100

EY | Assurance | Tax | Transactions | Advisory

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

© 2018 EYGM Limited. All Rights Reserved.

EYG no. 04935-183Gbl

BMC Agency GA 1009117

ED None



In line with EY's commitment to minimize its impact on the environment, this document has been printed on paper with a high recycled content.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.

ey.com

The views of third parties set out in this publication are not necessarily the views of the global EY organization or its member firms. Moreover, they should be seen in the context of the time they were made