

**19th Annual Global CEO Survey: Technology industry key findings**

*Growing in complicated times / Addressing greater expectations / Transforming: technology, innovation and talent / Measuring and communicating success*

# ***Redefining business success in a changing world***

## **Technology industry key findings**



**167**

*technology executives interviewed in 37 countries*



## ***About the 19th Annual Global CEO Survey***

In this year's survey, global business leaders voice fresh concerns about economic and business growth. At the same time, they see a more divergent and multi-polar world where technology is transforming the expectations of customers and other stakeholders. In *Redefining business success in a changing world*, we explore how CEOs are addressing these challenges. We surveyed 1,409 CEOs in 83 countries and a range of industries in the last quarter of 2015, and conducted face-to-face interviews with 33 CEOs.

Today's business leaders have a tough job finding growth and delivering results year in, year out. But they know an even tougher task lies ahead: to prepare their organisations for a more complex future where customers and other stakeholders increasingly expect them to do more to tackle society's important problems.

To equip themselves for this challenge – and to build trust and ensure long-term success – CEOs are focusing on three core capabilities. Firstly, they're focusing even more strongly on customer needs as well as drawing on their organisational purpose – what their companies stand for – to define a more comprehensive view of how their business operates within society. Secondly, they're harnessing technology, innovation and talent to execute strategies that meet greater expectations. And finally they're developing better ways to measure and communicate business success.

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## ***About the Technology industry key findings***

Technology CEOs are more optimistic about growth prospects than CEOs from other industries as technology is increasingly impacting every business. Companies across the globe from all industries are looking to technology and innovation to help meet stakeholder expectations, which are changing dramatically. Tech CEOs are also making significant changes to their talent strategies and their purpose.



### Growing in complicated times

**Tech CEOs are bullish about their growth prospects, despite some discomfort about the global economy. This bullishness may be a reflection of tech CEOs seeing the accelerating impact of technology across all industries.**

Tech CEOs are slightly less confident about global economic growth compared to last year. This year 78% believe the economy will either stay the same or improve in 2016, a decline of 4% from last year. Yet, tech CEOs are confident in generating higher revenues in both the short- and longer-term. In fact, 90% expect to increase sales in the coming 12 months and 94% expect revenues to rise in the next three years. As technology continues to play an increasingly important role across industries, tech companies are entering and disrupting other industries. To reach their growth goals, tech CEOs (59%) plan to continue engaging in strategic alliances and joint ventures. Tech CEOs ranked the US, China and UK as the most important markets for growth in the next 12 months.

**While tech CEOs are always sensitive to managing costs, the number of CEOs highlighting cost management as a top priority has come down, consistent with their higher confidence in future growth.**

Tech CEOs' bullishness about their growth prospects is reflected in their focus on managing costs. Nervousness generally translates into a higher level of cost management, but by the same token, confidence in the future places cost management at a lower level of priority. Only 50% of tech CEOs are focused on cost reduction this year compared to 60% last year. In addition, cost reduction is a lower priority for tech CEOs compared to CEOs from other industries (68%).

# 90%

of tech CEOs expect to increase sales in the coming 12 months and 95% expect to do so in the next three years.

**Overall, tech CEOs are more optimistic about growth opportunities than they are worried about threats. In fact, they are significantly more optimistic about opportunities (72%) than CEOs from other industries (60%).**

Despite their optimism, tech CEOs remain aware of major threats. The availability of key skills continues to be the top challenge cited by tech CEOs, followed by cyber security. In 2010 58% of tech CEOs were concerned about the availability of key skills, while in 2016 that number jumped to 80%. As the speed of technological change continues to accelerate, tech CEOs are more concerned this year (66%) than last (54%) about being able to keep up. Robotics, artificial intelligence, the Internet of Things and block chain are just a few emerging technologies that will likely cause significant change to companies, industries and how people work. For instance, the market for service robotics is expected to reach US\$19.4 billion by 2020 with a compound annual growth rate of 21.5%.<sup>1</sup> Because it is easier than ever before for start-ups to gain traction, 68% of tech CEOs are also concerned about new market entrants. In 2015 the total number of unicorns (start-ups valued at more than US\$1 billion) nearly doubled to 144, with total value of close to a half a trillion US dollars.<sup>2</sup>

**Cyber security continues to draw a lot of attention from the C-suite and boardroom and this is reinforced by survey responses. As the world increasingly becomes more connected, these concerns will continue to command an increasing amount of attention from the C-suite and boardroom.**

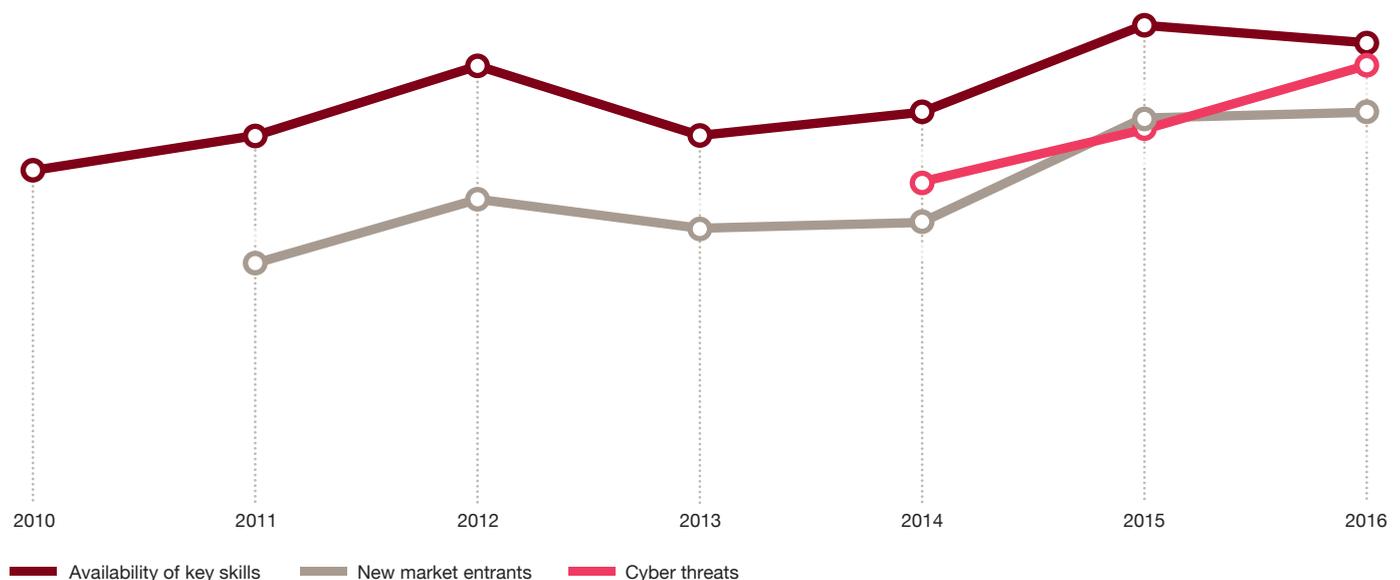
Cyber security moved up from sixth on tech CEOs' list of top threats (65%) to second this year (76%). Tech CEOs are notably more concerned about cyber security than CEOs from other industries (61%). According to PwC's *Global State of Information Security Survey*, even though tech companies boosted their information security budgets by 51% over 2014, technology respondents detected over twice as many information security incidents as the year before. Furthermore, three-fourths of tech CEOs believe the world is moving towards free and open access to the internet. In addition to more people having access to the internet, the increase in connected devices also contributes to the greater focus on cyber attacks.

*When the whole world is connected to the new generation of the Internet, the security implications – including cybersecurity, organised cybercrime, and brand damage when customer data is released or stolen – are dramatic. There is no such thing as a secure data centre, so cybercrime and related challenges are evolving almost at a faster pace than the technology can keep up.*

John Chambers  
Executive Chairman  
of the Board,  
Cisco Systems, Inc., US

**Figure 1: The availability of key skills continues to be the top challenge cited by tech CEOs, followed by cyber security**

Q: How concerned are you about the following?



Base: Technology CEOs (2016=167; 2015=176; 2014=117; 2013=154; 2012=115; 2011=59; 2010=59)  
Source: PwC, Annual Global CEO Survey data

<sup>1</sup>World Economic Forum, Sept 2015, *Deep Shift: Technology Tipping Points and Societal Impact*  
<sup>2</sup>Wall Street Journal, Jan 2016, *The Billion Dollar Startup Club*

## Addressing greater expectations

### Tech CEOs are focused in varying degrees on transforming their organisations to respond to ongoing cultural, social and demographic changes in our society.

Nearly two-thirds of tech CEOs believe top talent prefers to work for organisations with social values that are aligned to their own. Sixty-five percent (65%) of tech CEOs say corporate responsibility is core to everything their business does. So, not surprisingly, 75% of tech CEOs are making changes to their values, ethics and codes of conduct. In five years' time, 83% of tech CEOs believe that successful companies will be guided by a purpose centred on creating value for wider stakeholders. An impressive 95% of tech CEOs named customers and clients as the wider stakeholders with the highest impact on their organisation's strategy. When we asked CEOs to define, in their own words, what purpose means to them, 66% cited to create value for customers.

# 83%

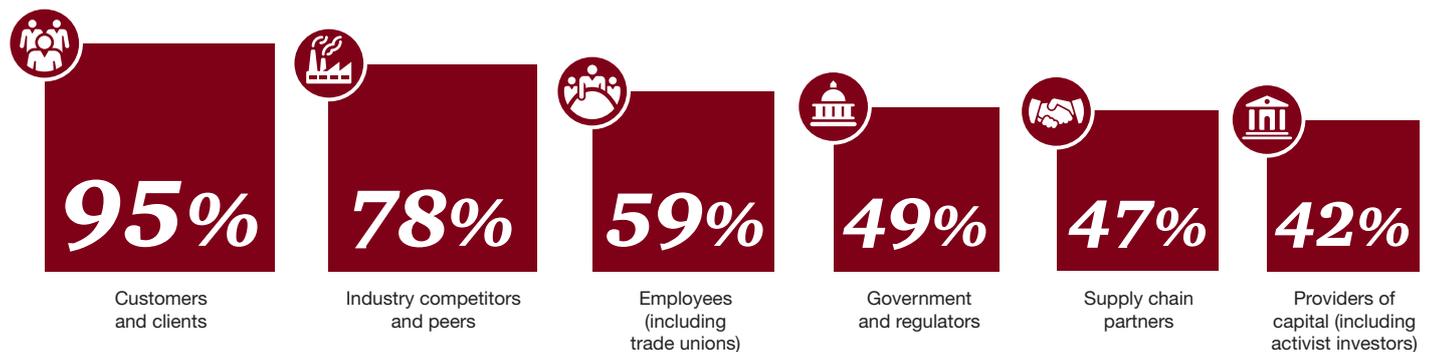
of tech CEOs believe that in five years successful companies will be guided by a purpose centred on creating value for wider stakeholders.

*Whatever purpose is, it matters more than ever in terms of the authenticity of a company with its employees, its customers, and its shareholders. If you don't connect with something bigger than next quarter's profitability statement, you're at risk in a highly disruptive world. Competition is coming from every angle. There's never been a time when competition was hotter than right now, in part because of the role of tech.*

Devin Wenig  
President and  
Chief Executive Officer,  
eBay Inc., US

**Figure 2: Tech CEOs view customers, industry competitors as key stakeholders**

Q: What impact do the following wider stakeholder groups have on your organisation's strategy?



Base: All respondents (Technology, 167)  
Source: PwC, 19th Annual Global CEO Survey

# Transforming: Technology, innovation and talent

## Technology is transforming relationships with customers and other stakeholders.

To sharpen their focus on customers, tech CEOs agree that technology will be key to building a closer customer relationship. A whopping 92% of tech CEOs agree technological advances will most likely transform wider stakeholder expectations of tech businesses over the next five years. As a result, 86% of tech CEOs are making changes to how they use technology to access and deliver on wider stakeholder expectations. Consistent to what tech CEOs have been focused on in previous years, tech CEOs believe a focus on data and analytics, R&D and innovation and customer relationship management systems will generate the greatest return in terms of engagement with wider stakeholders. CEOs from other industries also agree on these three key areas.

With these areas of focus in mind, tech companies are making significant strategic changes. Ninety-one percent (91%) of tech CEOs are changing how they manage their brand, marketing and communications. Today, in our highly social, interconnected and transparent world, technology companies are acknowledging the increasing importance of trust. PwC's *Consumer Insights Series* found that consumers seek brands that are transparent about their processes, labour, and the materials they use. They want brands that treat employees well. And they want to believe that brands are doing everything they can to protect customer privacy. In response, 90% of tech companies are changing how they define and manage risk. A similar amount (84%) are changing how and with whom they partner.

## Consistent with their faith in growth, tech CEOs are focused on their ability to hire the right people.

Two-thirds (67%) of tech CEOs plan to hire this year, a 12% increase from last year and the highest number in the past six years. But as we've shown, they're increasingly concerned about finding the talent they need.

A majority of tech CEOs (78%) believe a skilled, educated and adaptable workforce is the most important outcome for society today. A similar amount (79%) believe businesses should prioritise on delivering a skilled, educated and adaptable workforce.

Over half of tech CEOs agree that employees have a high impact on their organisation's strategy. They view their ability to engage and retain talent as critical to remaining relevant and competitive. To reach that goal, 45% of tech CEOs are changing their talent strategy to focus on their pipeline of leaders for tomorrow. An equal amount are changing their workplace culture and behaviours. Furthermore, 89% of tech CEOs are changing workforce rights and well-being plans in order to better engage stakeholders. These changes are also likely being driven by the vast number of millennials entering and reshaping the workforce. According to PwC's *Millennials Survey*, less than a third of millennials working in the technology industry expect to work regular office hours.

# 80%

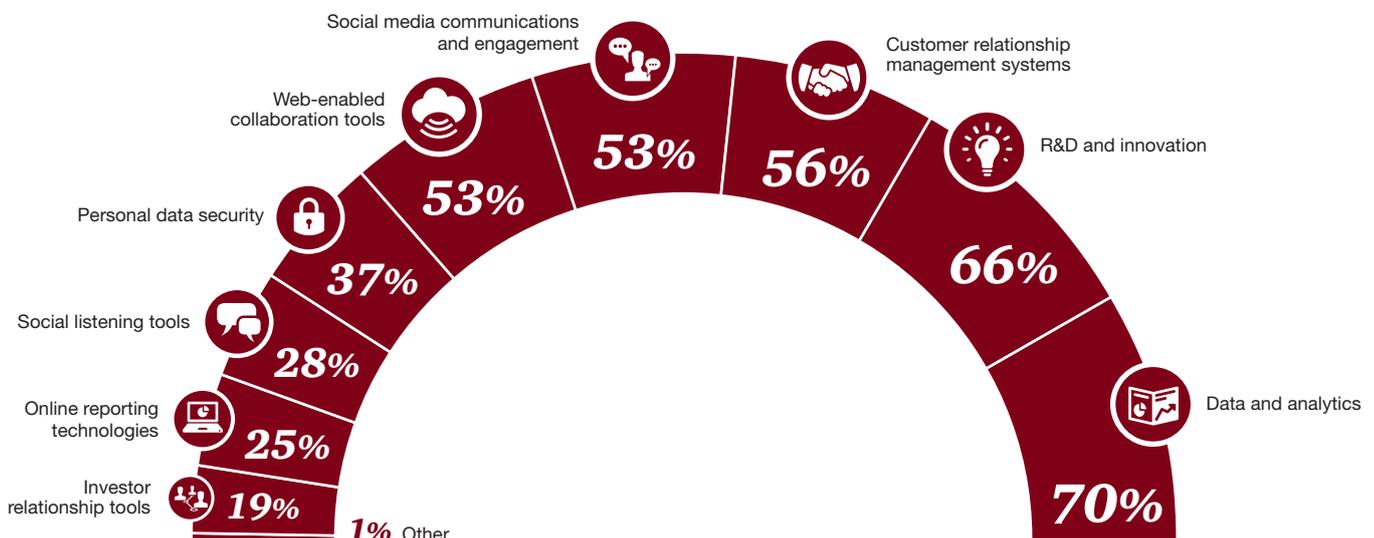
of tech CEOs are concerned about the availability of key skills.

*The ability for our employees to work together as one cohesive organization, yet to have great ideas that at any moment cause tension in the system, is of great importance to me. I believe that we create vibrancy by investing in our current employees so that we continuously learn new things and reinvent ourselves.*

Jen-Hsun Huang  
Co-Founder, President and Chief Executive Officer, NVIDIA Corporation, US

**Figure 3: Tech CEOs see data and analytics technologies as generating the greatest return for stakeholder engagement**

Q: Please select the connecting technologies you think generate the greatest return in terms of engagement with wider stakeholders.



Base: All respondents (Technology, 167)  
Source: PwC, 19th Annual Global CEO Survey

## Measuring and communicating success

### Tech CEOs want to improve how they measure the impact and value of innovation.

The tech industry is constantly changing. New products and category innovation define and redefine the sector's ever-shifting landscape. It is no surprise that innovation is the number one area where tech CEOs (55%) believe they should be doing more to measure the impact and value for wider stakeholders (customers and clients, industry competitors and peers, and employees).

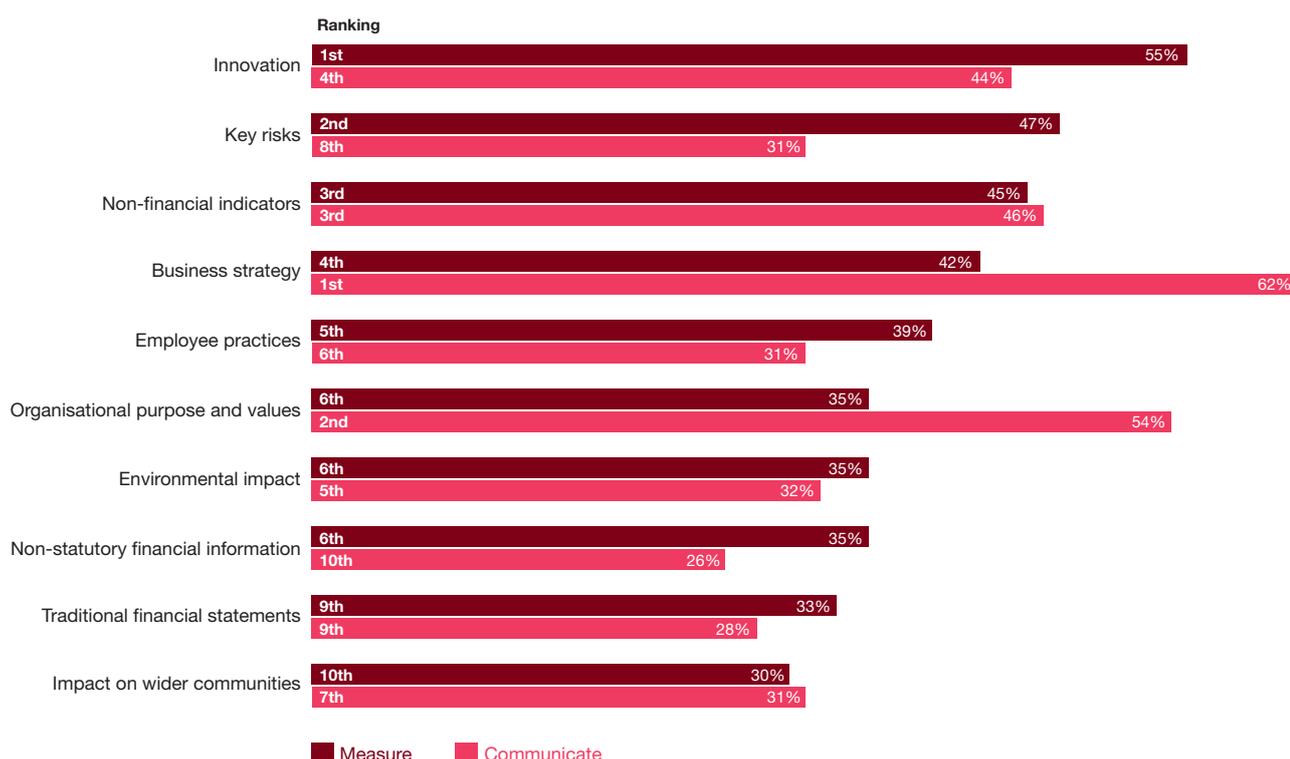
Tech CEOs (62%) believe they should be doing more to communicate the impact and value of their business strategy, in contrast to the total sample (54%). Consistent with their focus on making changes to how they manage their brand, marketing and communications and risks, they would also like to improve measuring the impact of non-financial information (e.g., brand) (45%) and key risks (47%). A majority of tech CEOs (70%) believe that business success in the 21st century will be defined by more than financial profit.

*Businesses can do a lot of things to communicate their impact on society. One of the challenges globally for digital businesses, because they are very start-up oriented, very entrepreneurial, and often very inward focused, they forget the fact that it's important to communicate to the broader ecosystem the impact that business is having.*

Kunal Bahl  
Co-Founder and Chief Executive Officer, Snapdeal, India

**Figure 4: Tech CEOs are seeking to better measure innovation and key risks**

Q: In which of the following areas do you think business should be doing more to measure/communicate impact and value for wider stakeholders?



Base: All respondents (Technology, 167)  
Source: PwC, 19th Annual Global CEO Survey



## Tough questions to ask about addressing greater expectations

How are you preparing your organisation to face non-traditional competitors now and in the future?

How are you ensuring you're investing in the right technologies to enable open engagement with your customers and wider stakeholder groups?

How are your CIO and CMO working together to make the best use of data analytics for a full picture of your customers now and into the future? How about your workforce?

How is your organisation making sure that it's measuring the right things in the right way in order to use data about non-financial impacts on decision-making?

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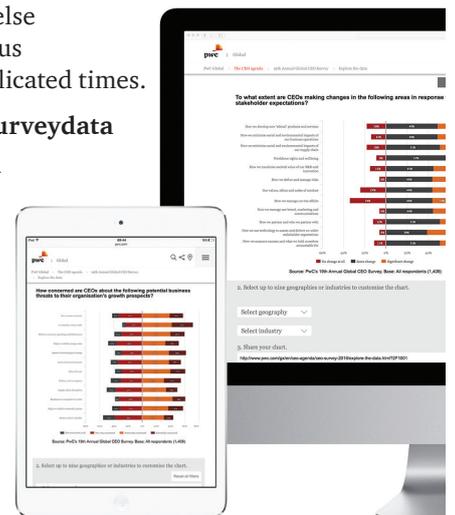
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## Explore the data

See for yourself what else technology CEOs told us about leading in complicated times.

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## Acknowledgments

PwC gratefully acknowledges the contribution to *Redefining business success in a changing world: Technology industry key findings* provided by the CEOs who participated in our in-depth interview programme, listed below. Watch the CEO video interviews for more great insights.

**John Chambers,**  
Executive Chairman of the Board,  
Cisco Systems, Inc., US  
[Watch the full interview](#)

**Mark Mondello,**  
Chief Executive Officer,  
Jabil, US  
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**Kunal Bahl,**  
Co-Founder and Chief Executive Officer,  
Snapdeal, India  
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**Jen-Hsun Huang,**  
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Chairman and Chief Executive Officer,  
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