



Telecom disrupted: the CEO challenge

Telecom CEO Outlook

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Foreword

With ubiquitous Internet access and the widespread use of smart phones and tablets, consumers can access information and entertainment anytime, anywhere, on any device. This connectivity has put consumers in the driver's seat, and their evolving preferences and behaviors will continue to drive further disruptions in the marketplace.

In this evolving and complex business environment, telecom CEOs face a number of formidable challenges in addition to juggling a long list of strategic priorities competing for their attention. With the current pace of innovation and disruption, Telecom service providers are facing significant threats to their traditional services. At the same time, they are seeing new market entrants encroaching on critical pieces of their business, creating a new category of competitor.

Against this backdrop, here are some of the more significant issues we see facing telecom CEOs:

Intense competition for core services—Today, telecom CEOs are in a price-sensitive fight for the consumers of their core business. In addition to industry disruptions, changing customer preferences and new competitors, telecom CEOs also need to focus on their core business, and at the same time look for a strategic advantage for the future.

Over-the-top and mobile video—Both a potential opportunity and a potential threat, over-the-top (OTT) video creates an additional need for a core telecom offering, namely wireless services. This opportunity brings telecoms squarely into the market for video content. Adding mobile into the equation increases the need for a robust wireless infrastructure to meet customer expectations for streaming video. This need can largely be met by telecom players. But OTT video can also be viewed as a threat in that it can be easily separated from other services. The downside in this case is that the network provider becomes the enabler for the primary product instead of being the primary product itself.

The Internet of Things—Telecoms will need to determine how best to position their companies to take advantage of the opportunities around the Internet-of-Things (IoT). Connected devices will need robust wireless services to operate effectively, suggesting increased competition as IoT becomes more commonplace. Telecoms also will need to innovate to develop other products and services they can provide around IoT.

Upgrades to network needed to roll out 5G—5G is clearly a great opportunity for Telecoms if it reaches its potential. 5G promises a wireless network that is much faster than even the wired networks most people now have in their homes. That would open an opportunity for wireless players to provide home high-speed Internet in areas where they haven't been the local wired provider. The downside is that 5G is expected to be expensive to build and rollout.

These disruptions will challenge telecoms to transform their business and operating models to achieve a competitive advantage. That means CEOs must determine how to differentiate and drive new services, move beyond established strategies to thrive in a rapidly changing business environment, and ensure their companies are well situated to meet these challenges.



Paul Wissmann
National Sector Leader,
Media & Telecommunications,
KPMG LLP



Richard Hanley
Advisory Industry Leader,
Technology, Media & Telecommunications,
KPMG LLP

Highlights



Data & analytics

Telecoms are using data and analytics in a number of important business areas: strategy and change, developing new products, and managing services. But in our survey, CEOs expressed misgivings about their organizations' ability to use D&A for gauging customer behavior, a critical measurement for driving growth.



Innovation and disruptive technologies

Innovation is on the minds of telecom CEOs, but many are struggling with integrating innovation into their company's culture. Nearly half said that their approach to innovation was "ad hoc" or siloed. At the same time, they are dealing with disruption—in some cases, deploying new technologies to better engage with customers, increase sales, and improve products and services; in others, reacting to external forces that are rapidly changing the market.



Cybersecurity

Reports of data breaches keep cybersecurity top of mind for telecom CEOs. But many seem to be coming to the viewpoint that cyber threats aren't something to be feared but a risk to be managed. Nearly all believe their organizations are somewhat prepared for a cyber attack, yet they see taking steps to further minimize cyber risk a less-than-urgent priority.



M&A

Telecom CEOs expect to be actively pursuing mergers and acquisitions. The targets will be companies that support the telecom's strategic priorities, such as speed to market, geographic expansion, and diversification into new businesses. Telecoms will also look to acquire emerging technologies, either by outright purchase or through partnerships or alliances.



Economic Outlook

Despite economic uncertainty, U.S. telecom CEOs were generally optimistic about the prospects for their companies and for the sector as a whole, although they acknowledged growth would be slow. The CEOs said that technology would be the main driver for this growth, as they continue to invest in new and enhanced services. Hiring, however, is expected to remain soft, with CEOs expressing confidence in the skill level already present in their organizations.

“Eventually, wireless carriers will need to invest in 5G. But Telecom CEOs are also faced with a complex web of strategic priorities, many stemming from a combination of market disruption, technology enablement and the race for the customer. All of these will demand capital investments. How to juggle these competing priorities will be a significant near term challenge for CEOs.”

— Paul Wissmann,
National Sector Leader,
Media & Telecommunications,
KPMG LLP

The big picture

Strategic priorities, investments and market issues

Throughout the report, survey results are broken out into key focus areas including Data & Analytics, Innovation and Disruptive Technology, Cybersecurity, and Mergers & Acquisitions. This section provides a more complete look at the survey questions that permeate each of those areas of focus.

As they navigate industry disruption, CEOs are simultaneously struggling with a myriad of competing strategic priorities, prioritizing key investments and utilization of resources, and unraveling a web of concerns about current market issues.

The next three pages cover the full range of responses from U.S. Telecom CEOs to these questions:

- What are the top strategic priorities for your organization over the next three years?
- Of the following, what are the top three areas you are devoting significant investment/resources to in the next three years?
- Indicate your level of agreement with the following statements [concerns about/agreements with issues]

Strategic priorities



Q. What are the top three strategic priorities for your organization over the next three years?

Fostering innovation	34%	Managing our ecosystem of partners/alliances	13%
Diversity/Inclusion	23%	Articulating our vision/culture/purpose	13%
Talent development/management	21%	Stronger marketing, branding and communications	13%
Greater speed-to-market	20%	Acquisition, merger or joint venture	11%
Geographic expansion	20%	Limiting brand risk in an age of transparency	11%
Minimizing cybersecurity risk	18%	Ensuring our KPIs are fit for purpose and accurately measured	9%
Stronger client focus (or to better meet customer needs)	18%	Digitization of your business (i.e., technology transformation)	9%
Becoming more data-driven	16%	Implementing disruptive technology	7%
Responding effectively to regulatory change	16%	Improving the relevance of our reporting to investors	7%
Diversifying into a new business area	16%	Responding to short-termism/influence of activist shareholders	7%

Responses from U.S. CEOs. Source: KPMG Telecom industry CEO outlook 2016

Significant investments/resources



Q. Of the following, what are the top three areas you are devoting significant investment/resources to in the next 3 years?

New product development	30%	Geographic expansion; outside home country	18%
Measurement and analysis of customer experience/needs	27%	Acquisition of a business, capabilities or assets	18%
Cybersecurity solutions	25%	Advertising and marketing/branding	16%
Increased staffing in locations where labor is cheap	23%	Internet of Things, machine to machine technology, Industrial Internet or other aspects of technology	16%
Increased employee compensation and training	23%	Increasing data analysis capabilities	16%
Geographic expansion; within home country	21%	Regulatory advisory solutions	13%
Expanding facilities	21%	Cognitive computing/artificial intelligence	13%
Business model transformation	20%		

Responses from U.S. CEOs. Source: KPMG Telecom industry CEO outlook 2016

Concerns about/agreements with issues



Q. Please indicate your level of agreement with the following statements. I am concerned about...

	%Rating (3-4)	Mean
About having to consider the integration of basic automated business processes with artificial intelligence and cognitive processes	98%	3.4
About the impact of global economic forces on our business	98%	3.4
About how Millennials and their differing wants/needs will change our business	96%	3.4
That new entrants are disrupting our business model by a company not currently perceived as a competitor	96%	3.4
That regulations will inhibit our growth	93%	3.3
About the amount of time I have to personally think strategically about the forces of disruption and innovation shaping our company's future	93%	3.3
About the loyalty of our customers	93%	3.2
About our competitors' ability to take business away from our organization	93%	3.2
About whether our organization is staying on top of what's next in services/products	93%	3.2
About the number of additional mission-critical issues that I have not grown up with/experienced previously in my career that I need to take a leadership position on	91%	3.3

Level of agreement:

1 = Do not agree and 4 = Completely agree

	%Rating (3-4)	Mean
About whether our organization is keeping current with new technologies	85%	3.1
About the relevance of our products/services 3 years from now	84%	3.0
About the quality of the data I'm basing my decisions on	84%	2.9
About the value and quality of external audit	84%	3.0
That our organization is not disrupting business models in the industry	75%	2.9
That our organization cannot increase its market share	66%	2.6
That the next 3 years will be more critical for my industry than the previous 50 years	42%	2.6
That we are not keeping pace with our customers' needs and expectations	34%	2.1
That we're not leveraging digital means to connect to our customers as effectively as possible	22%	1.9
That we don't have an effective strategy in place to counter convergence in the market	20%	1.9

Responses from U.S. CEOs. Source: KPMG Telecom industry CEO outlook 2016

Data and analytics

Telecoms and artificial intelligence

Telecom CEOs were confident that their organizations had the requisite skills in functional areas, such as finance, technology and strategy, and strategic priority areas, including innovation, cyber, and digital.



Nevertheless, many U.S. CEOs say automation and machine learning are likely to replace at least 5 percent of their workforce in technology and manufacturing operations within the next three years.

Data has become an invaluable resource as companies enhance their ability to analyze and draw insights from the vast quantities of information now available through the growing use of new technologies. Companies are using data and analytics to develop new products and services, drive process and cost efficiencies, implement strategy and change, and reach new customers.

For telecoms, customers are an important growth area, and accordingly, the CEOs in our survey listed customer focus as one of their highest priorities. Data and analytics is one way telecoms can gauge customer behavior and win new converts. For example, telecom companies can use the huge amounts of data that passes through their networks to determine how often and in what way customers are using their services. This information can include usage patterns, download history, content preferences, etc. This data, in turn, can be used in any number of ways to improve the consumer experience through enhanced products and services, such as increased capacity.

Yet the KPMG LLP survey found a critical gap in the way CEOs viewed how well they were using D&A to gain insights into their customers compared with how well they were using D&A overall. Among respondents, 89 percent said that they were effective in using D&A to improve performance, but only 7 percent of respondents considered themselves a leader in using D&A to better understand customer behavior. At the same time, only 27 percent of respondents put measurement and analysis of customer experience and needs as one of their top three areas for significant investment in the next three years.

Clearly, CEOs have some misgivings around their ability to use D&A to gain an advantage in the customer arena, despite acknowledging the importance of knowing their customers' preferences and behaviors. A closer look at some other survey questions can shed some light on this disconnect. We found that CEOs generally trusted the way their organizations used D&A, with at least three-quarters saying their organizations used data ethically, kept it secure, found it accurate, and used it effectively. However, in a seemingly inconsistent response, 84 percent said they were concerned about the quality of data they use for decision-making.

"Telecoms tend to trust that their people are 'doing the right thing' in D&A," said Will Hakes PhD, managing director, KPMG's Data & Analytics practice. "But the 'trust gap' still exists in their ability to leverage the 'right data,' which is critical to both becoming customer centric, as well as spotting disruptive competitor trends. Regardless of the D&A maturity in telecom, almost all respondents remain concerned about 'customer loyalty.'"

As we will see in the section on mergers and acquisitions, CEOs are looking to improve their customer interactions in part by acquiring the types of disruptive technology companies and capabilities that are currently upending their business models.

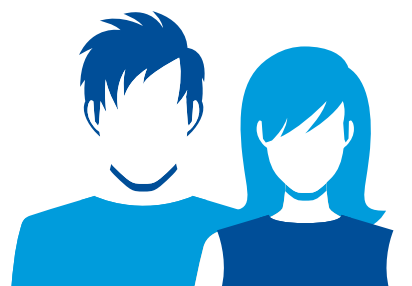


Reading the Millennials

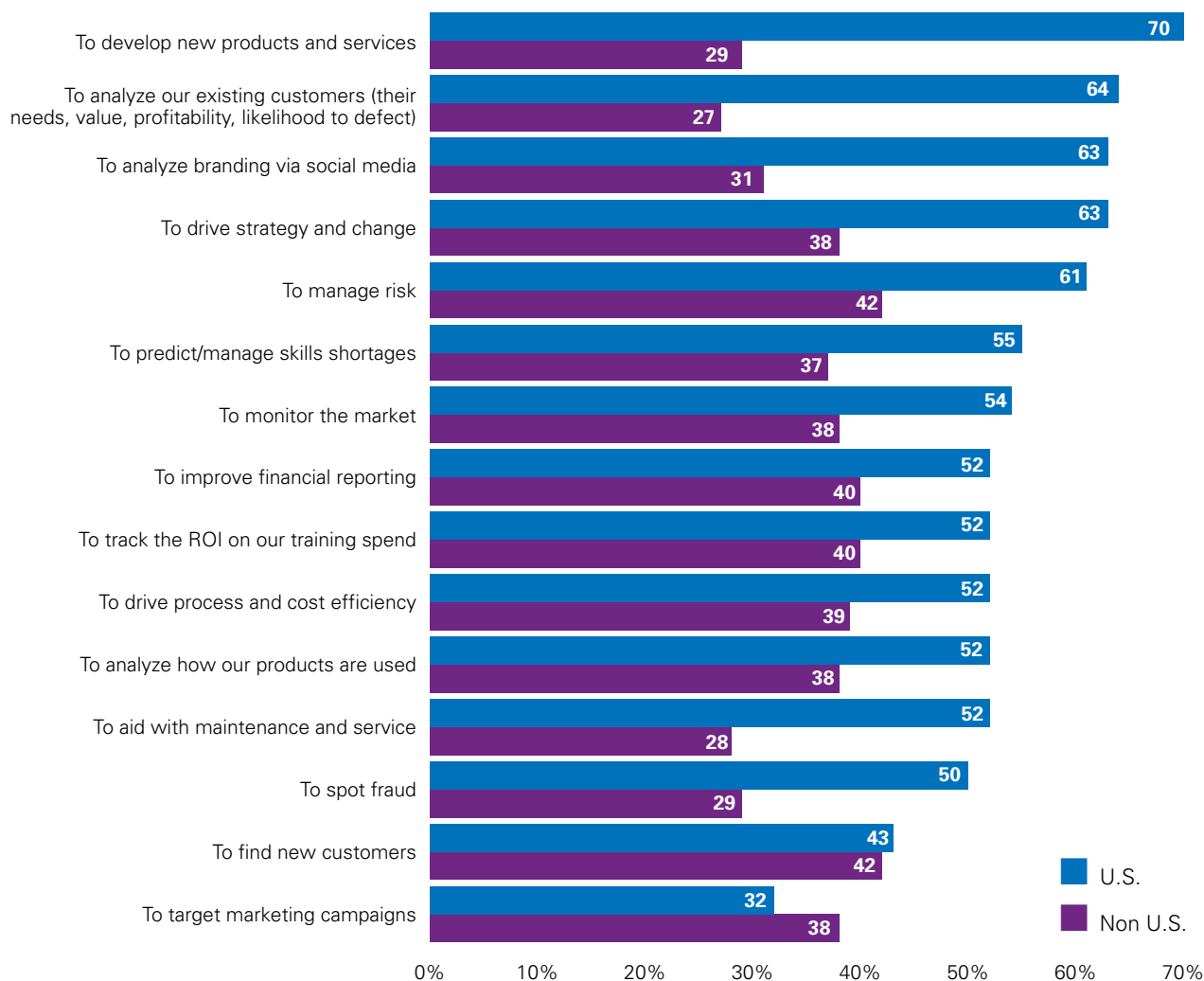
The use of D&A in the realm of customer behavior is also closely tied to one of the CEOs' greatest concerns as identified by the survey: how Millennials and their differing wants and needs will affect their business.

"Telecoms clearly sense the rapidly changing preferences among Millennials. Leveraging D&A, they are trying to move away from being product-centric to more customer-centric companies," Hakes said.

As stated above, CEOs were confident about their overall ability to use D&A, particularly in the areas of strategy and change, developing new products and services, and managing risk. They also expressed confidence in their D&A professionals, with 98 percent saying that they don't see any D&A skill gaps in their organizations over the next three years.



How is your organization using data and analytics?



Source: KPMG Telecom industry CEO outlook 2016

Innovation and disruptive technology

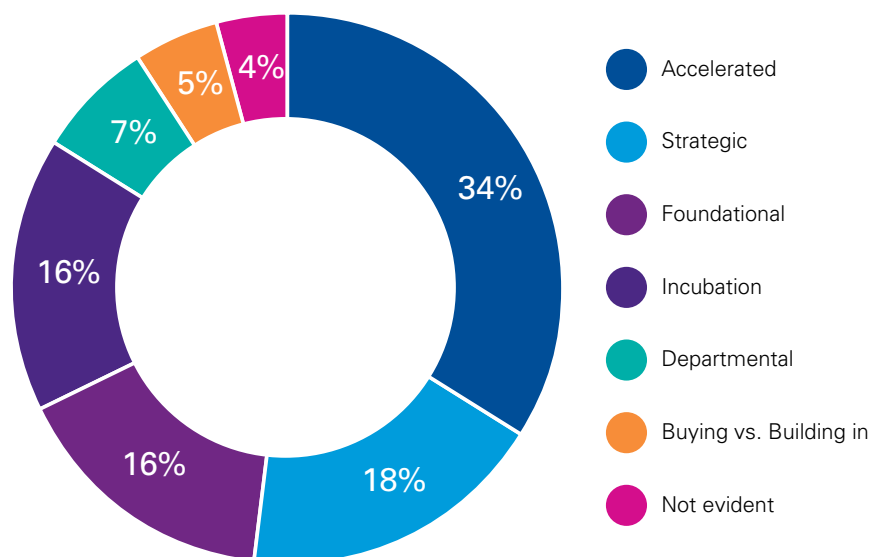
Telecom CEOs are thinking about innovation—a lot. But many are struggling not only with executing around innovation, but also fostering a culture that encourages innovation.

Among survey respondents, 70 percent said innovation is among the top three issues on their personal agenda, while one-fifth said it was the top issue. Similarly, 97 percent said management's innovation acumen was a necessary factor to drive successful innovation at their organization.

But while vision, commitment, and knowledge are undeniably critical for innovation to flourish, they are only part of the equation. Innovation needs to be integrated into a company's culture. And achieving that integration is where many telecom companies may need to focus. Indeed, 93 percent of CEOs said that they were concerned about the amount of time they have to personally think strategically about the forces of disruption and innovation shaping their company's future.

So while CEOs tend to be preoccupied with innovation, only half of those surveyed indicated that their organizations had a defined approach to innovation. Specifically, one-third described their organization's approach to innovation as "accelerated," while only 18 percent called their approach to innovation "strategic." For the remaining 48 percent, their approaches could be described as either ad hoc or siloed and not part of an integrated innovation program touching all parts of the organization.

Q. Which of the following statements best characterizes your organization's approach to innovation?



Responses from U.S. CEOs. Source: KPMG Telecom industry CEO outlook 2016



U.S. CEOs say that automation and machine learning will likely replace at least 5 percent of their workforce in the following functions:

- Technology
- Manufacturing/Operations
- Sales Force

"What these results suggest is that CEOs aren't overly concerned about implementing disruptive technologies. Rather, when they find one that they feel could be useful, they will pursue it and are confident about implementing it in a way that can provide a real benefit."

— Richard Hanley,
Advisory Industry Leader,
Technology, Media &
Telecommunications,
KPMG LLP



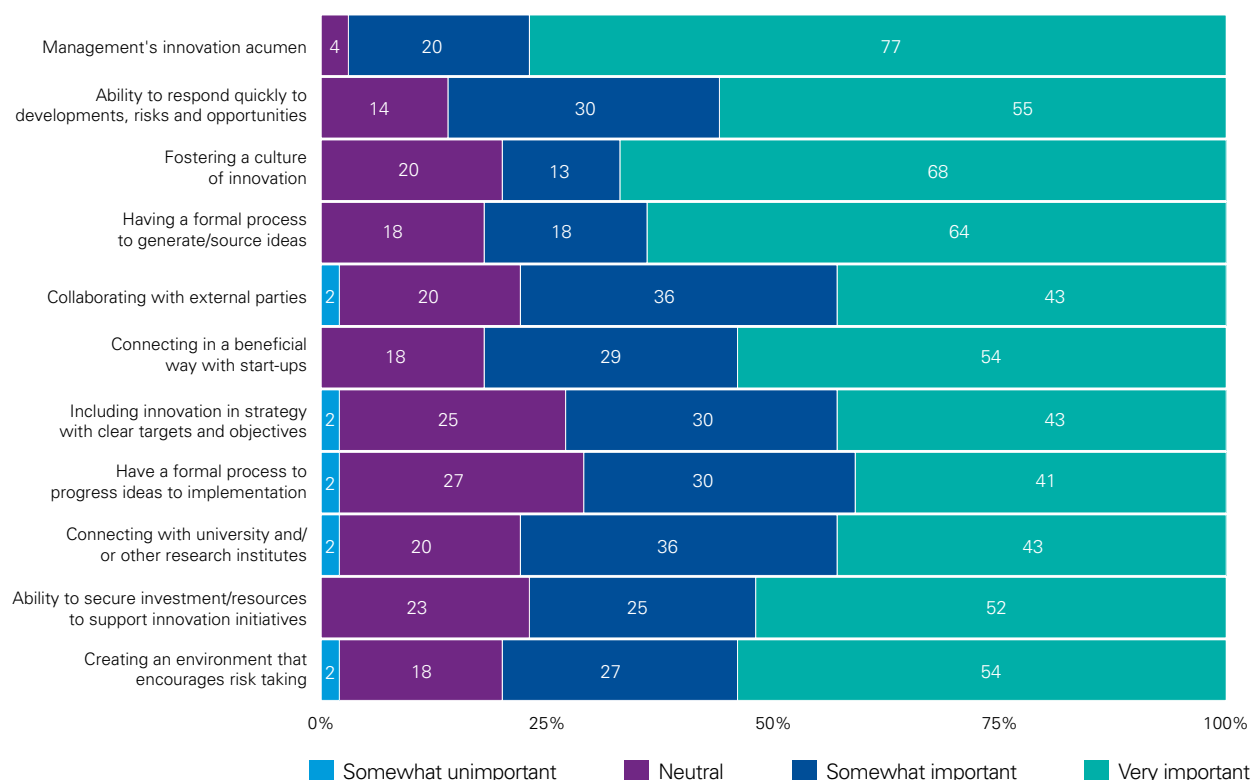
The survey results show a significant gap between how CEOs are thinking about innovation and how well they are actually carrying out initiatives that support true innovation. The type of sea change innovation often brings involves risk, and risk isn't a natural fit with many organizations. Leadership at these companies must embrace a strategic plan to make their vision around innovation a reality.

While grappling with the challenges of innovation within their own organizations, CEOs aren't standing still when it comes to disruptive technologies. For example, 70 percent said they are using disruptive technologies to improve interactions with customers (e.g., targeted messaging, social media reviews). Sixty-one percent said they are using them to increase sales, while the same percentage said they were using new technologies to improve products and services.

Despite these high percentages, other survey questions suggest that the use of disruptive technologies may be more opportunistic than strategic. Only 7 percent of respondents said implementing disruptive technologies was one of their top strategic priorities over the next three years, compared to 34 percent who cited fostering innovation. (And as we will see in the section on mergers and acquisitions, telecoms aren't developing these disruptive technologies in house, but obtaining them through acquisitions, partnership, and other collaborations.)

Importance of various aspects to an organization's ability to drive successful innovation

Q. How important do you believe the following aspects are in your organization's ability to drive successful innovation?



Responses from U.S. CEOs. Source: KPMG Telecom industry CEO outlook 2016

Fail fast, fail cheap

Innovation and disruptive technologies are changing the ways companies do business.

When asked what their organization is doing to accelerate their strategy, 45 percent of telecom CEOs said “adopt a ‘fail-fast, fail-cheap’ approach to execution.”

“That’s a surprising answer for telecoms, which are usually seen as being more ‘old school’ in their approach, more conservative than the smaller tech startups that normally embrace this kind of nimble and more risky strategy. It’s just another indication of the changing environment in which telecoms are finding themselves.”

– Paul Wissmann,
National Sector Leader,
Media & Telecommunications,
KPMG, LLP



Innovation and disruptive technology (continued)

With the Internet of Things, consumers will be buying the devices and the network and infrastructure that will connect them together. That could mean a loss of opportunity for wireless providers if they are perceived as only offering the connectivity. People are more interested in buying the device—the “thing” in the Internet of Things. Providers will need to somehow tap into that market.

Other aspects of innovation and disruptive technologies are also top of mind among CEOs. A full 98 percent of respondents said that they were concerned about having to consider the integration of basic automated business process with artificial intelligence and cognitive processes. Only slightly fewer, 93 percent, said they were concerned about their organization’s staying on top of what’s next in services/products. And 85 percent said they were concerned about whether their organizations are keeping current with new technologies. Similarly, 96 percent of CEOs said that they were concerned about new market entrants, not currently perceived as a competitor, disrupting their business models.

In the current climate of disruption and change, technology will remain a high priority for CEOs as they look to foster growth for company. But in their eyes, it is by far the only concern. Over the next three years, CEOs expect a number of other factors to affect the growth of their companies. Aside from technology, respondents cite the cost of doing business, new competitors, reputational risk, and global economic factors.

While technology remains top concern, these results suggest that the CEO agenda is complex, and the issues difficult and diverse. In today’s environment, the CEO has the demanding task of constantly juggling a number of different issues affecting the future of their companies.



Telecoms are continuously transforming their approaches to cybersecurity. One day it is dealt with as a major threat, two weeks later it can be used as an opportunity for the enterprise services business of the large telecoms. This constant transformation will continue as Telecoms move toward software defined networks built on cloud based computing platforms. The days of the wire fence and strong padlock protecting the central office are rapidly moving towards the constantly sensing network, with built-in security and real-time analytics to detect both external and internal threats. The next 5 years will be immensely important and exciting in the area of cybersecurity for Telecoms.

– Mike VanDenBerg,
Advisory Managing Director,
Cyber Security Services
KPMG LLP

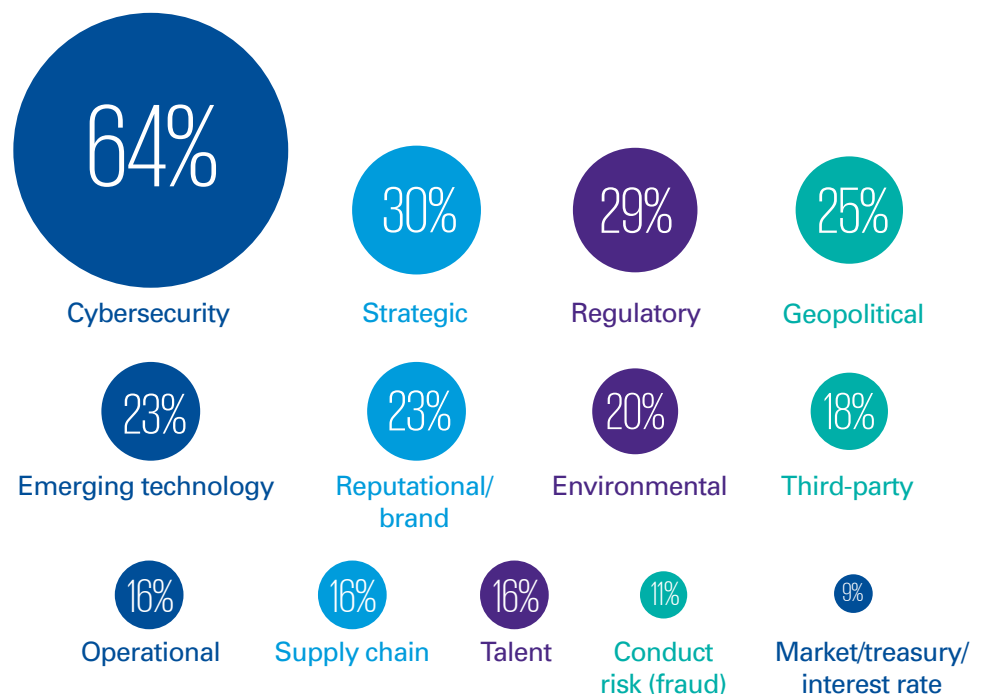
Cybersecurity

Nearly all U.S. Telecom CEOs surveyed said their organization is somewhat prepared for a cyber event, but few say they are fully prepared. These CEOs recognize that although cyber risk can't be eliminated entirely, it needs to be managed effectively. These company leaders must balance the adoption of new technologies—which are vital to remain competitive—with the risks of potential data breaches.

For a majority of telecom CEOs surveyed, the hazards of cyber activities remain top of mind, with 64 percent saying they were most concerned about cybersecurity risk — more so than strategic, regulatory, or geopolitical risks.

The response isn't surprising, since high-profile data breaches of well-known companies continue to regularly make the headlines. In fact, the number of breaches overall is on the rise. In 2015, the number of compromised consumer records reached 121 million, up more than 80 percent from the previous year.¹ In addition to occurring more frequently, incidents of data theft can be expensive and are getting more so, with the costs of a data breach rising some 57 percent over the past decade to \$217 per compromised record.²

Q. Which of the following risks are you most concerned about?



Responses from U.S. CEOs. Source: KPMG Telecom industry CEO outlook 2016

1 Source: SecurityWeek.com Web site — Data Breaches Numbers

2 Source: Ponemon Institute 2015 Cost of Data Breach Study: United States



To be sure, telecom CEOs have taken steps to address cyber threats. Indeed, many have embraced the task, with 68 percent saying that they are personally comfortable with the degree to which mitigating cyber risks is now part of their leadership role. However, only a scant few (2 percent) of respondents said that they were fully prepared for a cyber event, while the remaining 98 percent said their companies were only somewhat prepared.

This response suggests that for most companies, more work around cybersecurity may need to be done. Accordingly, the survey found that U.S. telecom CEOs plan to devote significant investments in the next three years towards cybersecurity. However, only 18 percent said that minimizing security cyber risk would be a strategic priority over the next three years.

A few explanations can account for that relatively low percentage. For one, organizations are already spending significant amounts on cybersecurity, and some are realizing that fears about a possible breach can be overblown. Another reason can be described as “cyber fatigue.”³ That means for some companies, the number of high-profile security failures has eroded the confidence of the boardroom in the ultimate effectiveness of cybersecurity. Put another way, company leaders are saying, if a breach can occur at an organization known for its size and technological capabilities, isn’t it inevitable that our company will eventually fall victim as well? That assessment shouldn’t necessarily be interpreted as some kind of fatalism. Rather, it’s the acknowledgement that cybersecurity is a risk, and like any other risk, it needs to be measured, managed, and understood⁴ With that in mind, company leaders are realizing the benefits of new technologies in keeping their companies competitive outweigh the cyber risks that these new technologies may bring.

Since all organizations are potential targets for cyber attacks it makes sense that companies consider cooperating at some level to share best practices and even to develop industrywide tactics to arm themselves against cyber criminals. The survey found some sentiment among CEOs for this kind of cooperation. Among respondents, 64 percent said they would be comfortable sharing experiences about a privacy breach at their organization with their peers to apply collective learnings to reduce risk.

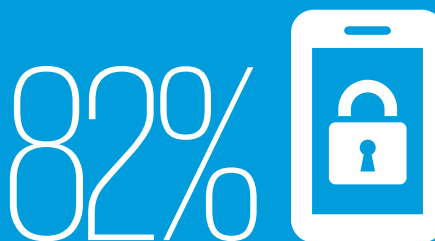
Data and analytics is another tactic telecom CEOs could emphasize more to fight cybercrime. Among respondents, only 50 percent said they were using D&A to identify fraudulent acts affecting their organizations.

Customer Perceptions

When it comes to cybersecurity, customer perceptions are another important factor companies must consider. Consumers want to know that their personal data is safe, and if a security breach does occur, it might send some customers to a competitor. Consider that KPMG’s Consumer Loss Barometer found that 82 percent of mobile phone carrier customers surveyed would switch carriers after a personal data breach if another carrier offered an option with no personal data collection.⁵ Of that 82 percent, 18 percent would even pay a premium for it.

These statistics from KPMG’s research should give telecom CEOs pause, particularly the 68 percent of respondents in the CEO survey who said that their customers were more concerned about their privacy than is their organization.

“While cyber security is a major concern, it also presents a great opportunity for mobile technology companies to make their customers feel more secure, and to change the dynamic of how their customers view them as a company,” according to KPMG’s Paul Wissmann.



of mobile phone customers said they would switch carriers after a data breach if the other carrier offered a no personal data collection option.

³ Source: KPMG LLP, “How to bounce back from cyber fatigue” (2016)

⁴ Source: KPMG LLP, “Now or never: CEOs mobilize for the fourth industrial revolution,” U.S. CEO Outlook (2016)

⁵ Cybersecurity Consumer Loss Barometer survey, Forbes Insights and KPMG, 2016.

Mergers and acquisitions



When it comes to mergers and acquisitions, telecom CEOs are expected to be active—but selective—in the targets they pursue. As these executives look to set the course for their company's future, they are seeking to acquire business capabilities or assets that support the company's strategic priorities, including greater speed to market, geographic expansion, and diversifying into a new business areas.

Among respondents, 55 percent said their organizations plan to make strategic acquisitions to accelerate the execution of its strategy. Given the maturity of the U.S. market, these strategic acquisitions could range from smaller technology acquisitions to large mergers that could enhance existing service offerings, such as AT&T's pending acquisition of Time Warner. And, 59 percent of CEOs said their M&A activity in the next three years will include buying businesses, assets, or capabilities from other firms, while 54 percent said they will be creating partnerships or joint ventures or collaborative arrangements with other firms.

To be sure, many of these assets and capabilities will likely revolve around technology. As we have seen in the section on Data and Analytics, telecoms have begun to employ disruptive technologies to improve interactions with customers, improve product and service offerings, and increase sales. But many of these emerging technologies are outside of the core competency of most companies. Gaining access to them either by outright purchase or through partnerships or alliances is one way to incorporate them into the business model sooner rather than later. Acquisitions, however, are not without challenges. They present a number of issues, including integration of technology and people into a vastly different organization in both size and likely culture.

Aside from actual deals, telecom CEOs are also looking to help drive innovation within their companies through other kinds of third-party relationships. The survey found that 83 percent of respondents plan to connect in a beneficial way with startups, 79 percent cited collaborating with external parties, including customers, partners and suppliers, while the same percentage picked connecting in a beneficial way with a university and/or other research institutes.

Another important motivator for M&A is geographic expansion, which was cited by CEOs as one of their strategic priorities and an area of significant investment over the next three years, with 21 percent of CEOs saying geographic expansion within their home country, while 18 percent saying outside their home country.

We have witnessed a number of significant mergers in recent years, notably consolidating the U.S. telecom market. These include AT&T's acquisition of DIRECTV, Verizon's purchase of AOL, and Charter Communications acquisition of both Time Warner Cable and Bright House Network. Those companies seeking to expand may need to look globally for new opportunities.

Merger and acquisition activity is only one side of the coin when it comes to optimizing business. Telecom CEOs are also looking at divestitures as part of their growth strategy, with 82 percent saying they would be separating non-core competencies over the next three years.

Divesting these no-longer-strategic assets will be one source of capital to help finance growth and the acquisition of these new capabilities.

Q. Of the following, what are the top three strategic priorities for your organization over the next 3 years? Responses focused on merger and acquisition activity include:

Geographic expansion

20%

Greater speed-to-market

20%

Diversifying into a new business area

16%

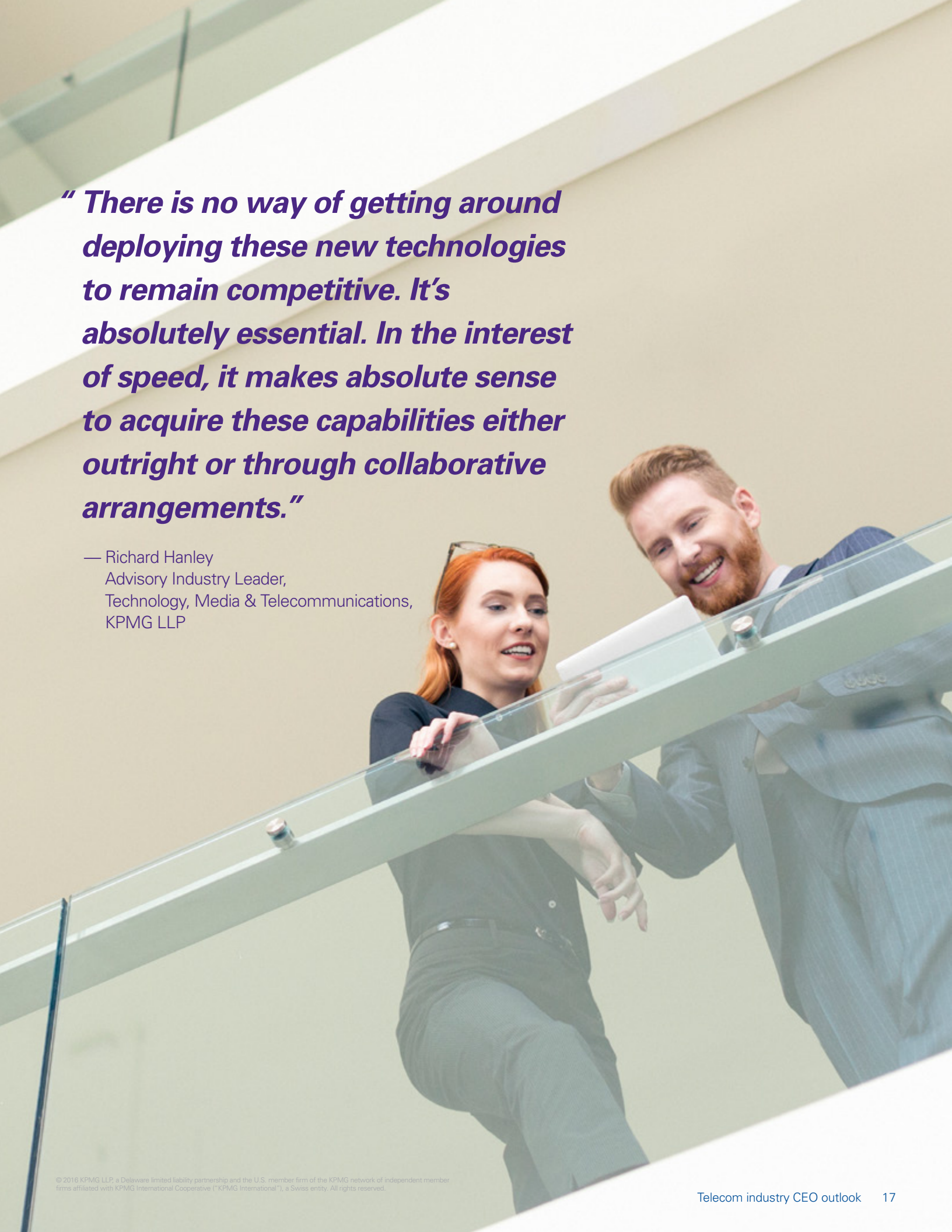
Managing our ecosystem of partners/alliances

13%

Acquisition, merger or joint venture

11%

Responses from U.S. CEOs. Source: KPMG Telecom industry CEO outlook 2016

A man and a woman in business attire are standing on a modern staircase with a glass railing. The woman, with red hair, is holding a tablet and looking at it. The man, with a beard, is leaning over her shoulder, also looking at the tablet. They are both smiling. The background is a light-colored wall.

“ There is no way of getting around deploying these new technologies to remain competitive. It’s absolutely essential. In the interest of speed, it makes absolute sense to acquire these capabilities either outright or through collaborative arrangements.”

— Richard Hanley
Advisory Industry Leader,
Technology, Media & Telecommunications,
KPMG LLP

Economic outlook

Factors driving growth over the next three years



Responses from U.S. CEOs. Source: KPMG Telecom industry CEO outlook 2016

Economic uncertainty, both globally and in the United States, remains a concern for business leaders. But U.S. telecom CEOs were generally positive about economic trends over the next few years, though they acknowledged that the pace of growth would be slow.

Despite intense competition in the sector, telecom CEOs anticipate their companies growing in the next one to three years. Not surprisingly, technology will be the engine behind this growth. CEOs see the overall telecom industry growing as well, as companies expand to offer new and better quality services and products to meet customer demands.

They likewise say the U.S. economy will continue its recovery but were less optimistic about the global economy.

Growth in the global economy remains sluggish, although forecasts show slight improvements over the next few years. According to the World Bank, the world's economy is expected grow 2.8 percent in 2017 and 3 percent in 2018.

In the U.S., conditions also remain restrained. The Conference Board forecasts that the U.S. GDP is estimated to grow at only 1.4 percent for 2016, the slowest growth pace since 2010. For 2017, real GDP for the U.S. is only expected to expand by 1.9 percent. The board also expects overall corporate profits to continue to decline.

Despite these subdued forecasts, U.S. telecom CEOs expressed guarded optimism about economic trends, although they were more pessimistic about the global economy—at least in the near term. About three-quarters of the CEOs said they were confident about the growth prospects for their company, industry, and the U.S. over the next 12 months. But only 4 in 10 expressed that level of confidence for the growth prospects at the global level for the same period. Taking a three-year horizon, even more U.S. CEOs were optimistic about growth prospects.

Focusing more closely on the telecom industry itself, 68 percent of these executives said the sector was in a “slow growth phase,” with revenue expected to increase by less than 2 percent per year. As to what factors would drive that growth, the CEOs had strong opinions. A solid majority, 59 percent, said the growth would come from new products, while 54 percent said new markets. Slightly smaller percentages went to new customers (45 percent) and new channels (43 percent).



Technology was also cited as a significant factor affecting the growth of their companies over the next three years. Indeed, the telecom industry is going through a dynamic transformation and expansion phase. With declining revenue from traditional services, such as wireless and wireline voice, telecoms are focused on broadband data services for revenue growth and increasingly on data hosting and cloud services.

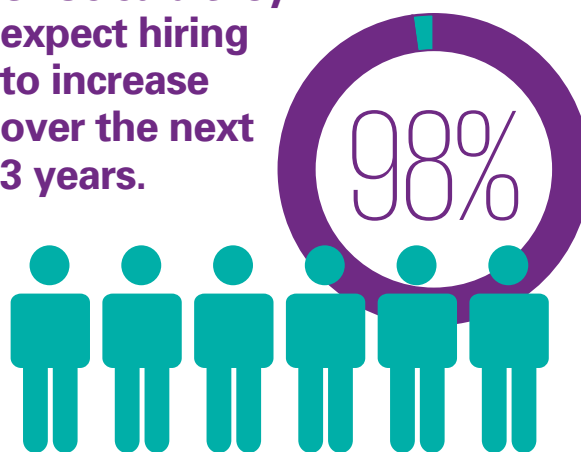
The Telecom industry remains a tremendously competitive sector, where technological superiority, first-class service, and ease of scalability are critical factors for success.⁶ With continuous innovation from device makers and emerging new service offerings, telecoms need to keep pace, either by developing new products or by partnering with others.

One innovation on the horizon is a shift to fifth-generation, or 5G, networks that can provide download speeds of 1 gigabit per second, 200 times that of the current 4G LTE network.⁷ U.S. telecom operators are expected to spend about \$104 billion between 2015 and 2025 to prepare for and implement the new 5G standard.⁸

Despite the rapid changes in the sector and the focus on innovation at the company level, telecom CEOs aren't predicting any immediate wave of new hiring. While the U.S. labor market has improved, most U.S. telecom CEOs expect their headcount to stay the same for the near term. But nearly all said they are expecting single digit percentage increases in headcount over the next 3 years. However, when it comes to the priority areas of innovation, cyber, and digital, most, if not all, Telecom CEOs don't see skills gaps opening up over the next three years.

CEOs on hiring

Nearly all U.S. telecom CEOs said they expect hiring to increase over the next 3 years.



Responses from U.S. CEOs. Source: KPMG Telecom industry CEO outlook 2016

⁶ Source: Nasdaq.com Web site, "Strong Growth Potential for U.S. Telecom Industry," Zacks Equity Research (Sept. 6, 2016)

⁷ Ibid.

⁸ Ibid.

Conclusion/Implications

Telecom CEOs have a long agenda of complex issues that they need to juggle to ensure the long-term success of their companies. Every week seems to bring a new disruptor or upstart competitor that challenges how companies do business. Customer behaviors and preferences are changing in response to new technologies that center on communications. These technologies bring their own risks around data and cybersecurity. And economic conditions remain uncertain.

One of the main challenges Telecoms are facing is the fight over their core business. To remain relevant as competition increases, telecoms will need to embrace a strategy that positions them as the primary platform of consumer choice for their main services.

Another source of competition, new entrants to the market, will require telecoms to offer not only new products, but also products that differential themselves from their competitors. These new players are often “ankle biter” competitors, small companies that don’t challenge the whole business but rather target a specific part of the business—and do it really well and sometimes at lower or no cost.

In this competitive market, innovation is a key concern for telecom CEOs. And while internal innovation is crucial, it is hard to imagine a company relying solely on its own creative teams to develop new products and services. Consequently, many CEOs will turn to an M&A strategy that will help their companies acquire new technologies to compete effectively against the many and varied disruptors and upstarts in the market.

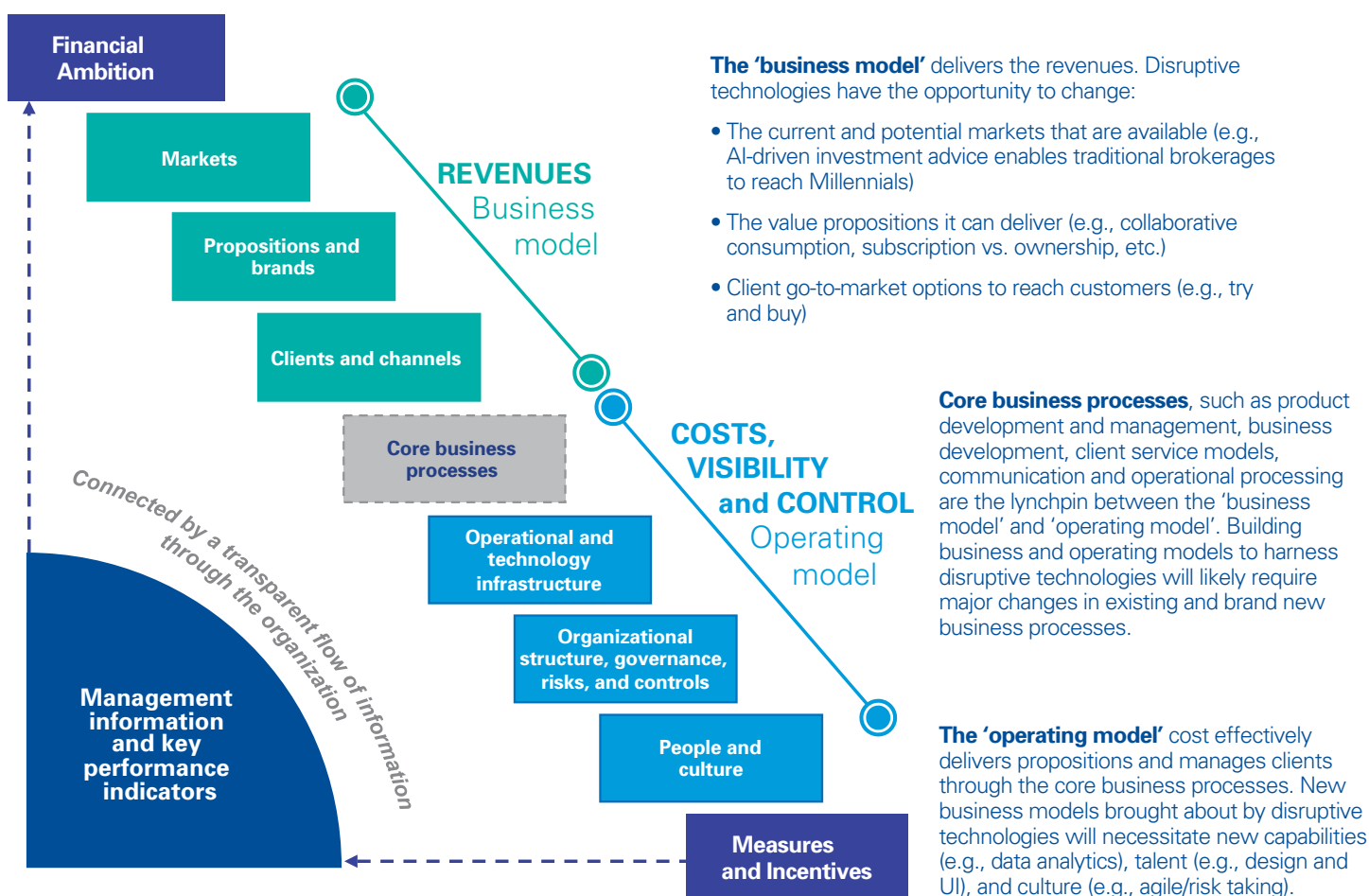
Telecom CEOs will also need to focus on building out their data and analytics capabilities to better understand the rapid shifts in customer behavior and to more effectively mine customer-driven signals of change. This need is especially true in light of CEO concerns about how the preferences of the Millennial generation will change the Telecom business.

Finally, with the growing reliance on digital and online technologies, cybersecurity continues to be both an operating and public-relations challenge. It needs to be near the top of the agenda for Telecom CEOs.

How KPMG can help

KPMG's proprietary 9 Levers of Value framework provides a methodical way for companies to think through and respond to the impact of disruptive technologies at an enterprise-wide level that connects strategy with execution.

KPMG 9 Levers of Value Framework



Demographics & methodology

The data in this report was compiled through a web-based survey of 155 global CEOs in the telecommunications industry. The survey was conducted in Q2 of 2016.

The results in this report focus almost exclusively on the 56 U.S. CEOs who completed the survey, of which 76 percent reported \$1 billion or more in annual sales. Almost all U.S. CEOs said their company is publicly traded and their tenure as a CEO was relatively short, with 70 percent saying they have been CEO of their current company five years or less.





About KPMG

KPMG's professionals combine industry knowledge with technical experience to provide insights that help Telecommunications industry leaders take advantage of emerging business opportunities and proactively manage business challenges. Our network of professionals in 155 countries, have extensive experience working with global technology companies ranging from the Fortune 500 to pre-IPO startups. We aim to anticipate the short-and long-term opportunities of shifting business, technology, and financial strategies.

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