

***Innovation and collaboration:  
keys to the future***



**pwc**

*One of the greatest challenges in the communications industry is also our greatest opportunity: delivering constant innovation by collaborating with others to drive ongoing growth in revenues.*

*And as we embark on the next century of innovation, what's the mood in the industry? In a word: energized.*

The industry's focus on innovation isn't new, however. Consider this: According to the AT&T archives and the Dallas Federal Reserve, a three-minute phone call from New York to San Francisco cost US\$341 in 1915. By 1960 the cost had plunged to \$12.66, adjusted for inflation<sup>1</sup>. Today, Republic Wireless, a US-based operator offers unlimited talk, text, and data over Wi-Fi for \$5 a month. So now you can talk coast-to-coast in the US for as long as you like, for no marginal cost.

That may sound like rampant deflation in action. But in fact it's about relentless innovation as our industry constantly pushes back the boundaries, seeking out new ways to deliver more value to its customers for less money.

And meanwhile, the disruptions just keep on coming. Here are a couple more points to consider:

1. Apple is now a phone company<sup>2</sup>, with 60% of its revenue coming from the iPhone, and the rest of the company is actually shrinking.
2. When people are on their mobiles, for every six minutes they spend using apps, they spend only one minute on the mobile internet<sup>3</sup>. And that time is getting shorter.

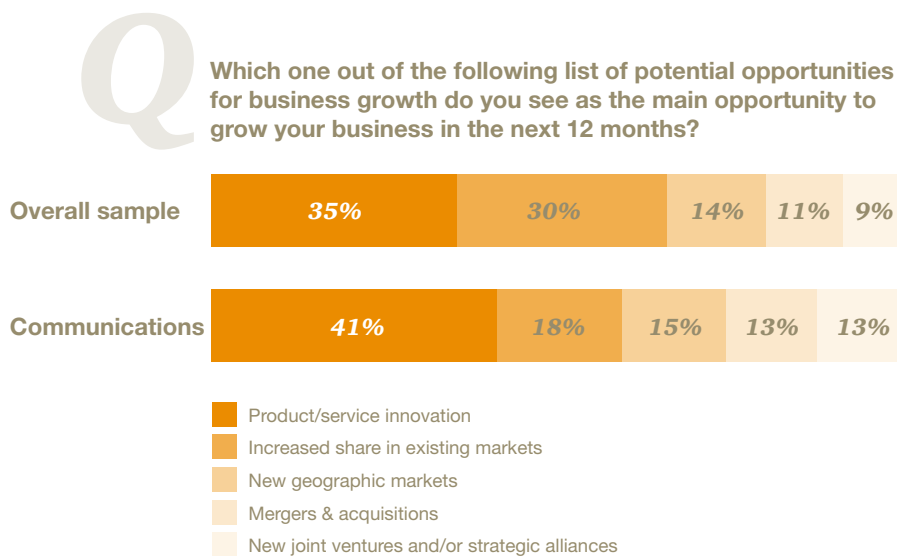
So, change is constant, and often surprising. And as we embark on the next century of innovation, what's the mood in the industry? In a word: energized.

That's the clear message from the *17th Annual Global CEO Survey*, which PwC published and launched at this year's World Economic Forum in Davos.

In that study, a stunning 90% of communications industry CEOs said they were 'somewhat' or 'very' confident about their company's prospects for revenue growth over the next three years<sup>4</sup>.

And what will drive that growth? Innovation, fueled by collaboration. Product and service innovation was highlighted by 41% of communications CEOs as their main growth opportunity, well above the global average for all industries (see Figure 1). And 62% said they had entered into a strategic alliance or joint venture in the past year, almost double the proportion in the global sample.

**Figure 1: How will Communications companies grow?**



Base: All respondents (Total sample, 1344; Communications, 39).  
 Note: "Don't know" responses are not included.  
 Source: PwC 17th Annual Global CEO Survey 2014

Yet this wave of collaboration has much further to go: over half of communications CEOs said they plan to forge a new strategic alliance or joint venture in the coming twelve months. This rush to collaborate underlines how the industry is responding in agile and proactive ways to a blizzard of change.

Breaking this down, we've identified seven distinct shifts that operators are currently facing. Each one demands innovation — often supported by collaboration — to stay ahead:

1. The 'pipe' is becoming commoditized. Cloud computing and collaboration with online application providers can help sustain its value.
2. The latest wireless trends — including LTE — are pushing telcos toward B2B services, again boosting the momentum behind cloud solutions.
3. Machine-to-machine connectivity is taking off, as the Internet of Things opens up new revenue and Big Data opportunities.
4. LTE implementation and roll-out are boosting the quality and breadth of services and, in turn, revenues.
5. Network sharing and the big switch-off as we advance to 4G are ushering in collaborative models and shared APIs.
6. Technology is continuing to lead the market, from social networking to feature phones, and we're seeing operators move toward open platforms and operating models optimized for the real-time data surge.
7. A drive for efficiency gains through closer technology integration, with the revenue mix rebalancing towards cloud-based services often in partnership with over-the-top players.

## *Shifts operators are facing:*

- The pipe is becoming commoditized.
- Network sharing and the big switch-off.
- Wireless is driving B2B services.
- Technology is fueling the data surge.
- M2M connectivity is on the uptake.
- A push for efficiency gains through technology.
- LTE is boosting quality and breadth of services.

Put these shifts together, and you get the sweeping change and profound disruption we're seeing across our industry and wider ecosystem. And we can see the impacts all around us. Communication demands from both consumers and business customers are evolving by the day, under the impact of advances in mobility, rising consumer-centricity, more integrated experiences, and a desire to have the world at our fingertips.

The result is a continuing virtuous circle of demand driving innovation, in turn generating more demand. There are ever more powerful devices; more advanced networks; apps, apps, and more apps. There is a rise in enterprise mobility; the roll-outs of mobile wallets, mobile health, and cloud-based mobile services. There are new ways of driving insights from Big Data through analytics, often in the cloud. And all this is happening against a background of escalating security

threats and consumers' continuing concerns over privacy.

As these developments unfold, the future is pointing towards communications moving beyond the network operators' domain to ever more collaborative models as device and over-the-top providers become major participants in the value chain, with advances like telepresence, unified communications, and ubiquitous device-to-device links. The scale and pace of change means network operators have no choice but to innovate constantly. And current developments are already leaving them battling for space, both in legacy services and new markets.

When you overlay this dynamic industry scenario with the impact of the global megatrends facing societies and businesses worldwide, the need for innovation becomes all the more pressing.

# So, what are these megatrends?

## *Demographic shifts*

There are deep *demographic shifts*, impacting how, where, and what type of content is consumed across the world, via what delivery channel and for what price.

## *Technology evolution*

Rapid *technology evolution* is disrupting and reinventing the way people do business and carry on activities in their personal lives, from shopping to banking to having their health cared for.

## *Urbanization*

*Urbanization* is seeing populations become more concentrated with the rise of new cities influencing the shape of the – mostly IP-based – network architectures of the future.

## *Shifts in global economic power*

*Shifts in global economic power* are making it ever more vital to have the right approaches in the right places at a local level, which in turn reshapes global talent strategies and opens up new, previously underserved customer segments to communications services.

## *Resource scarcity and climate change*

And *resource scarcity and climate change* are giving rise to fresh priorities and risks around energy efficiency and corporate responsibility while also driving the formation of new public-private collaborations and even whole industries to tackle society's problems.

These megatrends are not just affecting our industry. Yet, communications services are arguably the point at which the interplay and intersection of all these forces are at their most intense. From financial services to healthcare to media content delivery, communications is integrally involved at the forefront of the latest innovations. A high proportion — probably the majority — of breakthrough advances being made today in these areas and more are made possible by those in the communications ecosystem.

Innovation is an absolute prerequisite for navigating through this shifting landscape. It's vital to telcos' ability to grow revenues, fend off competition within and beyond the sector, and respond quickly and effectively to pervasive change. What's more, the companies leading the race to innovate have higher growth ambitions. How do we know this?

Last fall, PwC interviewed more than 370 C-suite executives from telecoms, media, and technology companies across 20 countries<sup>5</sup>. The insights gleaned from this are quite interesting.

First, innovation matters today — and will matter even more tomorrow. Eighty-three percent of the executives we interviewed say innovation is an important contributor to the success of their company. Nearly half describe innovation as a 'competitive necessity'. When asked about the role of innovation in five years' time, its importance rises still further.

*Operators need to think beyond fine-tuning existing offerings and technologies, and make a conscious decision to expand their focus to breakthrough and even radical innovations that will tilt the playing field in their favor.*

Second, innovation drives value. The most innovative 20% of the companies we interviewed have collectively benefited from an additional US\$45 billion in revenue over the past three years alone, compared with their least innovative counterparts. This is the equivalent of more than \$1 billion per company, or 14% revenue uplift.

So, we're an industry that lives or dies by innovation. That's easy to say. But what do we really mean by innovation? What barriers are in the way? And what can we learn from companies that have overcome them?

In our view, innovation in our industry comes in three distinct forms.

- First, **incremental innovations**. These are changes to an existing product or service, aimed mainly at protecting market share and maintaining margins. These innovations are usually met by a quick response from competitors. We estimate they make up between 40-55% of operators' innovation portfolios.
- Second, **breakthrough innovations**. These involve much more fundamental changes to technologies and business models, and will often deliver a sustained boost to revenues, margins, and competitive advantage,

because competitors find it harder to respond. Breakthrough innovations typically account for 20-35% of innovation initiatives.

- Third, **radical innovations**. As the name suggests, these trigger drastic changes in the competitive environment or even create entirely new businesses. Successful radical innovations are quite rare, but can generate explosive growth in previously unthought-of products and services. Radical innovation initiatives generally make up 5-15% of a communications services provider's innovation portfolio.

Now, all three types of innovation have a role to play. But in an environment as fluid and fast-changing as today's, incremental innovation in products and services is no longer enough on its own to sustain competitive edge and maintain a leadership position over time. Instead, companies need to think beyond fine-tuning existing offerings and technologies, and make a conscious decision to expand their focus to breakthrough and even radical innovations that will tilt the playing field in their favor. This means adopting a coherent innovation strategy, which plans for a higher proportion of these types of innovation in the portfolio.

True, breakthrough and radical innovations will fail more often than incremental innovations. But when they work, the payback is many magnitudes greater. This is because they can turn industry change and disruption from a series of challenges into multiple opportunities.

To open up and seize these opportunities, communications companies need to develop an innovation *culture*. One that mirrors and adapts to a dynamic competitive environment, by encouraging people across the business to think the unthinkable and experiment, and not over-punishing them when one of their innovation ideas fails. Instead, the culture should rally round and encourage them to go back to the drawing board and think up another one.

In our research, 45% of the executives we interviewed agreed that establishing the right innovation culture internally is a key challenge to making innovation happen. But when we looked at the common attributes shared by the companies with the most well-balanced innovation portfolios, a pattern emerged that points to a solution. It is that the leading innovators in our industry excel at multiple disciplines and invest in a broad set of innovation priorities, rather than simply focusing on one area of innovation expertise.



These attributes enable an organization to foster, inspire, and sustain performance-enhancing innovation in many interrelated dimensions simultaneously. Innovation in each dimension involves capitalizing on — or initiating — changes in the wider ecosystem. And each can include a mix of incremental, breakthrough and radical innovation from across the portfolio.

- There’s the dimension of products and services, harnessing shifts such as the rise of the digital home and the power of combining social, mobile, analytics, and cloud.
- There’s organizational innovation, applying levers like collaboration and incentives to ingrain innovation into the fabric of the business — ultimately moving to a model of ‘organization by design’.
- There’s innovation around operating models and platforms to deliver more with less, with cloud computing once again a primary focus.
- Innovation in revenue models, such as the great strides being made at the moment in mobile advertising and streaming digital content on a subscription basis.
- Innovation in personalizing service experiences, based on customer insights and engagement down to the individual level, by unleashing the value of big data.
- And there’s innovation in security and privacy, turning these concerns from risk factors to competitive differentiators through effective cyber defense, and building a reputation as an organization that people can trust with their personal data.

The list goes on, but what matters is that these areas should all be on the radar of the innovation strategy and that the search for innovation opportunities goes far beyond incremental innovation in product

and services and leaves no stone unturned elsewhere in the business.

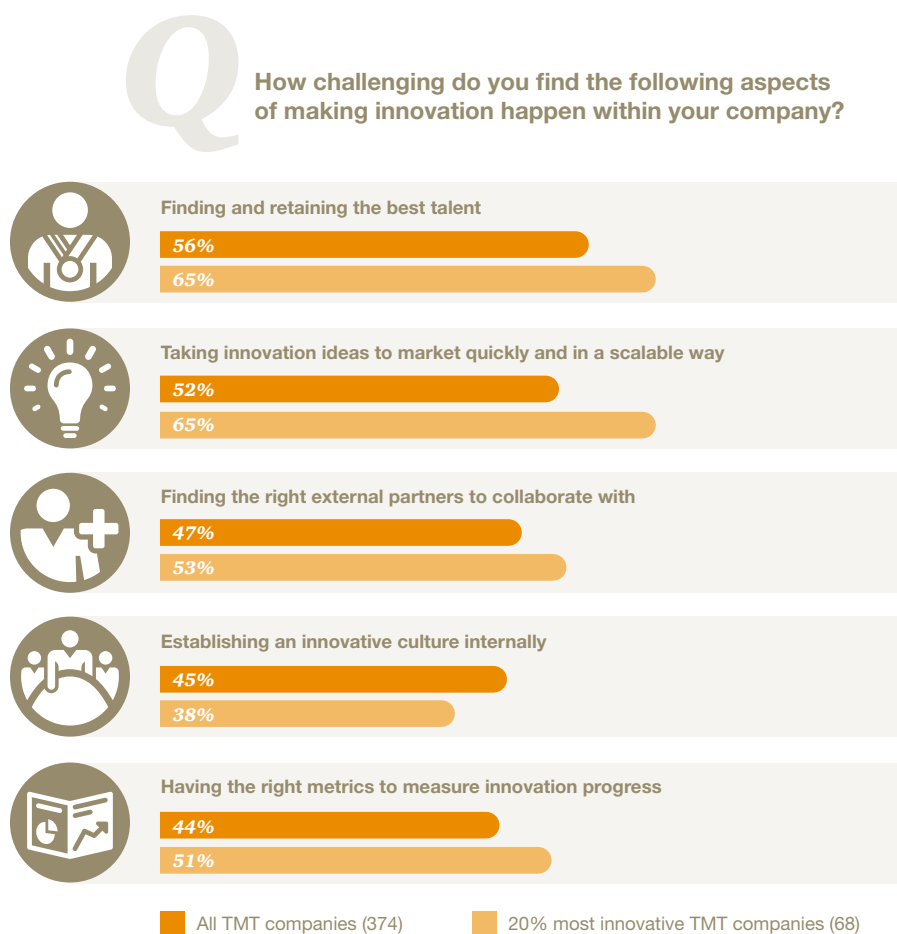
So, what characteristics do operators need to lead industry innovation in this way?

One quality that is often overlooked is the need for a business to be brutally honest — even hyper-critical — in assessing its own innovation performance. As part of our C-level interviews on innovation, we presented our respondents with several key aspects of making innovation happen and asked how challenging they thought each one was in their business. The list included factors like ‘finding and retaining the best talent’; ‘taking innovation ideas to market quickly

and in a scalable way’; and ‘finding the right partners to collaborate with’.

In our third paper on innovation, we split out the responses from the companies we’d identified as Innovation Decathletes and compared them with the average across all 374 respondents. And guess what? The leading innovators were more likely to identify these various issues as challenging (see Figure 2). This finding might seem counter-intuitive at first, but not if you think about it. It suggests that those leading the innovation race are more realistic in their assessment of the hurdles they must overcome to make innovation deliver results.

**Figure 2: TMT companies responded that each of these areas are “challenging” to making innovation happen.**



The message is clear: don't underestimate the challenges involved in boosting innovation capability. And if you're already good at innovating, don't get complacent. Over the past two decades we've seen many companies that once seemed invincible plunge into oblivion. The only way to remain a leader in innovation is to continue to appreciate how challenging it really is.

So, having embedded an innovation culture and made a ruthlessly honest assessment of its own capabilities, how can an operator build on these elements to drive value-creating innovation further and faster?

Having worked with, studied, and interviewed innovation leaders across today's global telecoms, media, and technology ecosystem, we think there are six key learnings that all companies can start applying with immediate effect:

1. **Be hungry for innovation.** The best innovators have a sense of urgency, which drives change.

2. **Know how to manage risk and failure in the pursuit of innovation.** Those with the ability to take intelligent risks — and who are able to “fail fast” in the pursuit of game-changing innovations — will emerge as leaders.
3. **Balance clear focus with big-picture thinking.** Think beyond product innovation and regard all parts of your business as opportunities for innovation.
4. **Coordinate and orchestrate,** devolving responsibility where appropriate but maintaining high-level oversight.
5. **Embrace new operating models,** like corporate venturing and incubators.
6. **Collaborate with partners** — across sectors, within different functional areas, and at different points in the value chain — to enhance the customer experience.

## Learnings companies should start applying now:

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2. Know how to manage risk and failure in the pursuit of innovation.
3. Balance clear focus with big-picture thinking.
4. Coordinate, orchestrate responsibility.
5. Embrace new operating models.
6. Collaborate with partners.



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### Endnotes

- 1 <http://www.fool.com/investing/general/2014/01/29/50-reasons-were-living-through-the-greatest-period.aspx>.
- 2 <http://www.theatlantic.com/business/archive/2014/04/its-official-apple-and-facebook-are-phone-companies-now/361192/>.
- 3 <http://cdixon.org/2014/04/07/the-decline-of-the-mobile-web/>.
- 4 PwC's 17th Annual Global CEO Survey – Key findings in the communications industry, February 2014.
- 5 [http://www.pwc.com/en\\_GX/gx/innovationsurvey/technology-media-telecommunications.jhtml](http://www.pwc.com/en_GX/gx/innovationsurvey/technology-media-telecommunications.jhtml).

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