Learning from innovation leaders
Winning practices of the most successful Technology, Media, and Telecom innovators

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What qualities and practices set the leading innovators within the Technology, Media and Telecom (TMT) industries apart from their peers? What practical steps do these companies take to embed innovation throughout their business? In which areas do they focus their innovation effort: products and services, customer experience, business model? In this report we distil the lessons that can be learned from a cohort of leading TMT companies, and identify how to apply these lessons to enhance any TMT company’s innovation capability.

PwC surveyed 374 C-suite executives from TMT companies across 20 countries. Based on their responses, we identified the 20% most innovative and the 20% least innovative in order to compare and contrast their experiences.¹ The leading innovators take significantly different approaches to managing innovation, with the below core winning practices:

• They have a greater focus on breakthrough and radical innovations;
• Their innovation portfolios are more diverse;
• They coordinate innovation to a greater extent to ensure consistency of effort;
• They embrace new innovation operating models,
• And they collaborate more with internal and external stakeholders.

In Seizing the Innovation Edge, the first in our series exploring innovation within TMT,² we identified the steps companies take to develop a coherent innovation strategy, and how this focus on innovation, coupled with intelligent innovation spending, generates faster revenue growth.

This paper digs deeper into the strategic and operational decisions that leading innovators make about innovation. The final paper of the series will address the obstacles to implementing more sophisticated innovation practices, and explore how leading innovators successfully overcome these challenges.

¹ See appendix for full details of how these two groups were identified from the 374 TMT companies interviewed.

² PwC, Seizing the Innovation Edge: How TMT companies can harness breakthrough innovation to boost revenue (2013), [http://www.pwc.com/gx/en/innovationsurvey/assets/tmt-innovation-report.pdf]
The 20% most innovative companies we interviewed are what we refer to as “Innovation Decathletes,” at the forefront of innovation in their respective industries. They excel at multiple innovation disciplines rather than focusing on a single area of expertise, and succeed by finding the right balance between incremental, breakthrough and radical innovations, between short- and long-term planning, and between innovation excellence and operational efficiency.

Underpinning the success of the “Innovation Decathlete” are five crucial building blocks:

1. **Intelligent risk-taking**
   A greater focus on breakthrough and radical innovations

2. **Versatility**
   Ability to innovate business model

3. **Game plan**
   Coordinated, orchestrated innovation structures

4. **Endurance**
   Long-term vision embracing new innovation operating models

5. **Collaboration**
   More frequent partnering internally and externally

### 1. Intelligent risk-taking:
A greater focus on breakthrough and radical innovation

Innovation comes in many forms. Leading TMT innovators understand that incremental innovation alone is unlikely to be sufficient to meet their significant growth ambitions. Instead, a broader innovation portfolio is required, comprising the right mix of incremental, breakthrough and radical innovation. An ideal portfolio is self-sustaining: radical innovations achieve very high growth rates from a low base, while incremental innovations generate the cash that enable companies to invest in future high-cost, radical and breakthrough innovations.

Our survey found that between 30% and 45% of the typical TMT company’s portfolio of innovation efforts are made up of radical and breakthrough innovation. However, the proportion of breakthrough and radical innovation is much higher in the portfolios of the leading TMT innovators, typically between 45% and 65%, see Figure 1. Leading innovators focus their breakthrough and radical innovation on technology, followed closely by products and systems and processes.
This gap is not coincidental: leading TMT innovators deliberately take intelligent risks with their portfolio, understanding that significantly higher levels of breakthrough and radical innovation, while more risky, are more likely to lead to competitive advantage and increased revenue or market share. For example, when Rostelecom, a Russian telecom provider, saw the profitability of its domestic broadband market shrink due to increased competition, the company focused innovation efforts on a breakthrough cloud services offering, and by doing so has captured a sizeable share of a growing market for cloud services in Russia.

When asked about their priority for innovation over the next 12 months, the leading 20% of TMT innovators are far more balanced in their responses than they would have been a decade ago. Now, the most commonly cited areas of focus are products (27%), closely followed by technology (22%) and services (21%), see Figure 2. Although business model (10%) and customer experience (7%) innovation are not at the top in terms of investment, these crucial areas for TMT companies feature more prominently among priority areas than they have historically, according to Rob Shelton, PwC’s Global Innovation Leader. Our survey of TMT innovators and examples from the global market suggest that business model innovation and customer experience innovation will continue to rise as investment priorities, leading to even more balanced innovation portfolios in the future.
Critical for achieving a higher proportion of successful breakthrough and radical innovations is a more intelligent approach to risk-taking and the ability to eliminate the stigma of failure. Fostering an environment where failure and risk are reasonably tolerated is cited as an important component of innovation culture by 79% of the leading TMT executives in our research.

“You need to have a bias toward very quick decision-making,” says Bob Pittman, Chairman and CEO of Clear Channel Communications, an American mass media company.3 “If you make the wrong move, then quickly change it until you get it right.” According to Pittman, faster failure means more time is freed up to spend on developing commercially-viable innovative ideas. “If I try 10 new things,” says Pittman, “two may be clear winners and two may be clear losers. That means I’ve got six in between. Most organizations let everything live except the clear losers. Over time that stuff in between doesn’t really help, it just takes up a lot of resources and confuses thinking.”

The top 20% of TMT innovators are not afraid to make big bets and act quickly in the pursuit of competitive advantage.

2. Versatility: Ability to innovate business model

Product innovation often remains the comfort zone, beyond which most companies find it difficult to venture. This is because executives can easily understand how product innovation supports core priorities, while business model innovation requires a rethinking of what those core priorities should be.

Business model innovation is where companies can create white space that truly results in a competitive advantage. “Business model innovation equips you with a different value proposition so you don’t have to compete head-on with competitors,” says Dan DiFilippo, Leader of PwC’s Global TMT practice. “Sustained competitive advantage through technological or product enhancements is not possible, since other companies can quickly match and at times easily exceed these innovations.” To remain at the forefront of an industry, business model innovation cannot be ignored.

How are leading TMT companies innovating their business model? A large majority (90%) are finding new ways to monetise their existing products or services, or are reaching out to un-serviced or under-serviced customers (87%). Figure 3 shows how the pursuit of these areas of business model innovation separates the top performers versus the average TMT companies. In addition, although enhancing customer experience (pursued by 81% of the top TMT innovators), is not a major differentiator between the top innovators and the rest of the pack, it’s clear that most TMT companies see this as a “must-have” innovation.

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One company that has been able to achieve differentiation through customer experience innovation is Uber, a mobile application that connects passengers with drivers of vehicles for hire or ridesharing. Uber’s value proposition integrates expertise in geolocation technology, mobility solutions and online payment to create an innovative on-demand transportation services model that’s available in 25 countries around the world—and expanding. The company has eliminated the frustration associated with traditional limo or taxi service by showing consumers the location of drivers in real-time, and using consumer reviews to maintain a pool of high-caliber drivers.

Business model innovation also helps companies avoid commoditisation. In the telecom industry, for example, traditional business models are under threat, with monthly recurring charges for services used gradually being replaced by alternative pricing models such as embedded transactions or advertising-supported delivery. Selling their core offering – connectivity – in new ways enables telecom services companies to enhance relationships with customers. This transforms a service traditionally perceived as a ‘dumb pipe’ into something smart and valuable, which can command a premium price-point. It also results in greater efficiency through simpler processes and wiser investment for long-term bandwidth advantage. The impact of fundamental business model innovation, therefore, is felt on both the top and bottom line.

Netflix: rapid growth through disruptive business model innovation

Netflix’s keys to success:

- Appetite to pursue disruptive innovation
- Ability to spot and react quickly to external market trends
- Continual innovation of its business model

Netflix launched its first website in 1998 with only 925 titles available to rent. Now it is a global service with a turnover of more than $3.5 billion. Revenue grew by 47% CAGR between 2000 and 2012 and its share price has increased by more than 4000% since its IPO over a decade ago.

Much of this success can be attributed to Netflix’s ability to spot emerging trends and innovate its business model accordingly. In 2002 DVD overtook VHS by number of units sold and consumers were becoming frustrated with the limited choice available at high street rental stores. In response Netflix launched its DVD rental by mail service, innovating the operating model to match available titles with customers’ priorities, and investing in the necessary infrastructure to bring this breakthrough business model direct to consumers.

In 2007 when broadband penetration in the US grew from almost nothing to over 70%, Netflix launched its online streaming service. It took advantage of the more favourable fixed cost model that streaming offered compared to DVD rentals. This allowed Netflix to raise prices but retain customers by offering better value flat-fee subscription models.

The most recent wave of Netflix’s innovation has been its creation of original content, an initiative driven by research that suggests customers are less likely to cancel subscriptions after watching exclusive content. Netflix was the first company to adopt a backward-integration model, buying and streaming content before subsequently creating its own. This approach has been well-received by customers and recognised by the wider industry through Emmy Award nominations for Netflix original content in 2013.

What’s next for Netflix? To maintain its competitive edge, the company will have to focus innovation efforts on continually increasing customer value. Netflix is likely to increase the amount of original content that it produces and adapt its business model for leasing content to reflect this. Further innovations may focus on the home entertainment hardware market with Netflix developing a hardware offering to complement its rental and streaming services, perhaps in collaboration with existing hardware providers.
Leading innovators don’t rely on revenue-boosting innovation happening by chance. They coordinate and orchestrate approaches to innovation to ensure the best ideas are quickly captured and scaled into commercially-viable propositions. When asked about the way their company manages its innovation processes, the leading TMT innovators are more likely to describe their approach as ‘formal’ (38%), see Figure 4. In contrast, the least innovative TMT companies take an ‘informal’ approach whereby innovation happens ad hoc rather than as a disciplined process.

Similarly, leading TMT innovators take a more coordinated approach to innovation. The vast majority (88%) say they drive innovation across their entire organisation to ensure consistency of innovation efforts across business units and territories, see Figure 5. This means that throughout an organisation there is ownership of the different processes that make innovation happen most effectively. This kind of well-orchestrated approach supports greater alignment between different teams and functional areas. It promotes greater sharing of innovation best practices and resources, and fosters greater discipline when developing and evaluating the commercial potential of innovative ideas.

Figure 4. Leading TMT innovators are more likely to manage innovation formally; less sophisticated innovators manage their innovations informally.

Figure 5. A coordinated and orchestrated approach to innovation is favoured by leading TMT innovators.

3. Game plan: Coordinated and orchestrated innovation structures
But what does an optimum structure look like in practice? “One of the leading US cable television networks recently centralised their innovation efforts within a single unit,” says Russ Sapienza, PwC US Entertainment and Media Principal. “They brought in an executive from a large technology company to run this unit, introduce new ways of thinking and oversee the development of new products and services. Reshaping their organisational structure has been the catalyst for greater innovation across the business.”

As more TMT companies focus on their innovation strategy, the trend towards adopting well-orchestrated and coordinated innovation structures is likely to continue.

4. Endurance: A long-term vision embracing new innovation operating models

Investing in the right innovation infrastructure is crucial for generating returns on innovation investment. Growing innovation capability in-house can also save on the need for costly acquisitions later on. By investing in an internal innovation incubator, one B2B publisher cut its average go-to-market time for new ideas by seven to ten months across its business units. Leading TMT companies choose operating models that allow for the rapid development of innovative ideas in more iterative and collaborative ways. Internal “hackathons,” events that bring together programmers, developers, and creatives to collaborate intensively on new projects, traditionally software-related—have become a popular way for TMT companies to bring their people together for short periods of time to focus on experimental innovation initiatives.

Too many executives still display short-term innovation thinking. They mistakenly try to eliminate risk from innovation and in doing so, end up killing innovative ideas that have long-term potential. “Many companies fail to invest in more experimental R&D approaches because they can be seen as speculative or a waste of time and money. As a result, companies can miss the megatrends and find it difficult to play catch-up,” says Kayvan Shahabi, PwC US Technology Advisory Leader.

When asked about the innovation operating models they think will drive the most growth for their business, there was a much higher instance of corporate venturing among the leading TMT innovators – 21% of top TMT innovators said that this practice would drive growth for their company, compared with only 13% of the TMT average, see Figure 6. Corporate venturing involves investing innovation resources in external start-ups, and mirrors broader trends towards more coordinated innovation structures.
approaches as illustrated elsewhere in this paper. Bertelsmann’s corporate venture capital funds, Bertelsmann Digital Media Investments (BDMI) and Bertelsmann Asia Investment (BAI), focus on early-stage investments in digital media products, technologies, and distribution channels based in Asia, Europe, and North America. Investments have included ecommerce, affiliate marketing, educational and publishing companies, among others. Both BDMI and BAI aim to accelerate growth by connecting startups with relevant Bertelsmann divisions as well as crucial financial and management resources.

Bertelsmann also entered the growth market of education and became an anchor investor of the University Ventures Fund to launch innovative degree and continuing-education programs in Europe and the United States. Investments were made in education providers such as University Now, as well as in companies that offer online degree programs in partnership with accredited universities.

Technology has facilitated new innovation practices. Innovation labs, where employees or customers interact with new technologies or product prototypes, create a physical space where innovation can flourish. One leading US retailer, for example, has worked with a technology partner to build a digital simulation of its stores to explore how customers would react to new store layouts and features. This approach promotes quick experimentation and is both low-cost and low-risk compared with trialling innovations in physical stores first.

### Telefónica Digital: incubating innovative ideas for long-term growth

**Telefónica’s keys to success:**

- Strong external focus on innovation
- Organizational setup and corporate culture allowing for fast speed of ideation and execution
- Balance among different aspects of the innovation portfolio, including value chain, business model, and product innovation

Spanish telecom provider Telefónica made a decision to radically innovate its innovation practices, creating a separate corporate entity, Telefónica Digital.

Telefónica Digital is more than an incubator. It sets a new level of commitment by creating a “business unit” around innovation. Lead by one of the parent company’s senior executives, Telefónica Digital has become the vehicle to channel significant resources and the forefront of the company’s product and service innovation. It has been given ambitious targets to pay back the original investment quickly and begin creating significant new revenue streams. Its establishment as a separate unit provides no place to hide behind legacy revenues.

Importantly, it has also been given the freedom to take a long-term view about innovation. Telefónica Digital has been set up with significant autonomy from the main corporate body allowing for increased agility. At the same time, there are important collaboration channels woven into both organizations to ensure that Telefónica Digital drives innovation for the whole group rather than just being an isolated OTT (over-the-top) player which happens to have the Telefónica brand.

“Many of Telefónica Digital’s innovations have focused on changing the company’s role within the telecom value chain,” says Nicolas Borges, PwC Spain Telecom Industry Advisory Partner. “They are interested in understanding what role Telefónica’s products and services play in consumers’ lives, in order to find new ways of interacting with customers.” For this reason, many of Telefónica Digital’s approaches have focused on creating new alliances and collaborations, both internal and external, to find opportunities for the business to compete in new areas of the market.

“It is still early days,” says Borges, “and we won’t know the true impact of Telefónica Digital for years to come.” However, it has already generated innovative offerings, such as TuGo, a service that allows customers to use their mobile number on other Wi-Fi enabled devices to make and receive calls. This innovation both aims to add value to customers in new ways, and more efficiently manage spectral resources, fully leveraging the core skills and assets of the telecom service provider.
5. Collaboration: More frequent partnering internally and externally

In a rapidly-changing market where competitive pressure is intensifying and R&D budgets are being squeezed, most companies cannot afford to undertake all of their innovations on their own. Collaboration and partnering have become standard practice for companies looking to generate breakthrough and radical innovations. Becoming an innovation “partner of choice” for a TMT company can enhance the value of a brand and open up revenue streams in new markets. The most innovative companies embrace this trend: virtually all of the 20% most innovative TMT companies have a plan in place to collaborate with strategic partners (99%) and customers (97%), and a large majority with suppliers (78%) and academics (74%), see Figure 7.

Figure 7. The most innovative TMT companies have plans to collaborate with a broader range of partners than their less innovative peers.

With which of the following do you have a plan in place to collaborate over the next three years?

<table>
<thead>
<tr>
<th></th>
<th>All TMT companies (374)</th>
<th>20% most innovative TMT companies (68)</th>
<th>20% least innovative TMT companies (77)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic partners</td>
<td>86%</td>
<td>74%</td>
<td>63%</td>
</tr>
<tr>
<td>Customers</td>
<td>99%</td>
<td>71%</td>
<td>67%</td>
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<tr>
<td>Suppliers</td>
<td>86%</td>
<td>78%</td>
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<tr>
<td>Academics</td>
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<td>57%</td>
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<tr>
<td>Competitors</td>
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However, it is not just their range of collaborative partnerships that sets the leading innovators apart, but the fact that their collaborations have a fundamental impact on products and services created. The most innovative TMT businesses co-create over four times the proportion of their products and services with external partners, and over twice the proportion with customers, compared with the least innovative companies, see Figure 8. External collaboration represents an opportunity for partners to pool resources and generate ideas to significantly enhance growth. The most successful collaborations occur when partners synthesise their respective strengths, rather than try to balance out gaps or weaknesses. This creates unique and differentiated offerings to customers.

“Making collaborations work involves three vital ingredients: flexibility, trust, and, above all, a focus on customers and their needs,” says Pierre Sur, PwC Global Telecom Industry and United States TMT Leader. “The most fruitful collaborations often happen when companies from different parts of the value chain come together to innovate their offering for customers.”

Figure 8. Leading TMT innovators co-create over four times the proportion of products and services with external partners compared to the least innovative.
Applying these lessons to your business

The leading TMT innovators are successful because they apply innovation discipline across their organisation. Below are six key learnings you can start acting on today. We recommend you use these learnings as a framework to identify the best new innovation talent for your organization, since TMT talent of the future will need to possess the core characteristics of Innovation Decathletes and easily apply their winning practices. You can also use these learnings of the top TMT innovators to put your current employees through Innovation Decathlete training, and transform your corporate culture.

1. **Be hungry for innovation.** Is innovation in your organisational DNA? Innovation should be prioritised and rolled out to all levels of the organisation. The best innovators have a sense of urgency, which drives change. They are never satisfied with the status quo.

2. **Know how to manage risk and failure in the pursuit of innovation.** In order to reap the benefits of a broad innovation portfolio, don’t focus merely on incremental innovation. To achieve significant growth, your innovation portfolio needs the right mix of breakthrough and radical 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 focus with big-picture thinking.** Think beyond product innovation, and consider all parts of your business as opportunities for innovation. Are you planning to innovate your business model as well as your products and services?

4. **Coordinate and orchestrate.** Is your innovation infrastructure generating the desired level of return? If not, it may be because innovation is pursued with an informal approach. Leading innovators coordinate and orchestrate their innovation efforts, devolving responsibility where appropriate but maintaining oversight at a high level.

5. **Embrace new operating models.** Corporate venturing and incubators are growing in popularity among TMT companies as preferred innovation operating models. Leading innovators aren’t afraid to experiment with new approaches, provided they allow for fast failure of poor ideas and rapid development of good ones.

6. **Collaborate with partners.** Does your organisation encourage collaboration? Leading TMT innovators explore a diverse range of collaborations—across sectors, within different functional areas and at different parts of the value chain—with the ultimate aim of enhancing customer experience.

In the final paper in this series we will examine how common barriers to innovation can be overcome, and will shine a light on best practice innovation approaches occurring across the TMT industries. For further insight on how TMT companies are harnessing breakthrough innovation to drive growth, see the first paper in our series, Seizing the Innovation Edge.
Appendix: a note on methodology

We would like to thank the 374 TMT executives who took part in our Global Innovation Study. Our quantitative and qualitative research was conducted among C-suite executives responsible for innovation within their company across 20 different countries globally. In this context innovation was taken to encompass products, services, business model and customer experience. Eighteen percent of interviews were from companies that generate more than US $1bn+ revenue. Interviews were conducted by PwC and Meridian West.

For the purpose of our analysis, from the companies interviewed we have identified the top 20% innovators (68 companies), and the bottom 20% innovators (77 companies) to compare and contrast their relative characteristics and experiences. These companies were identified based on a balanced scorecard comprising their responses to the following six areas explored in our study:

- How important the interviewee said innovation is to their company;
- Their appetite for innovation (on a scale from ‘innovation laggard’ to ‘innovation pioneer’);
- The proportion of annual revenue derived from major products or services launched in the previous year;
- The proportion of annual revenue spent on innovation;
- The proportion of products and services co-developed with external partners;
- Their projected revenue growth over the next five years.

For each of the six attributes every company was given a score between 1 and 5. The most innovative 20% of companies scored a total of 24 or more out of 30, whilst the least innovative 20% of companies scored a total of between 8 and 15 out of 30.
For help and advice with your innovation strategy and process, please contact one of our innovation leaders.

**Global TMT Leader**  
Dan DiFilippo  
Tel: +1 646 471 8426  
dan.difilippo@us.pwc.com

**Global Technology Industry Leader**  
Raman Chitkara  
Tel: +1 408 817 3746  
raman.chitkara@us.pwc.com

**Global Telecom Industry Leader**  
Pierre-Alain Sur  
Tel: +1 646 471 6973  
pierre-alain.sur@us.pwc.com

**Global Entertainment and Media Industry Leader**  
Marcel Fenez  
Tel: +852 2289 2628  
marcel.fenez@hk.pwc.com

**Australia**  
David Wiadrowski  
Tel: +61 2 8266 7598  
david.wiadrowski@au.pwc.com

**Brazil**  
Federico Servideo  
Tel: +55 11 3674 3577  
federico.a.servideo@br.pwc.com

**Canada**  
Philip Grosch  
Tel: +1 416 814 5855  
p.grosch@ca.pwc.com

**China, Hong Kong and Singapore**  
Huw Andrews  
Tel: +86 21 2323 2002  
huw.andrews@cn.pwc.com

**France**  
Peter Vickers  
Tel: +33 156577305  
peter.vickers@fr.pwc.com

**Germany**  
Sebastian Feldmann  
Tel: +49 89 5790 5273  
sebastian.feldmann@de.pwc.com

**India**  
Ramaswami Lakshman  
Tel: +91 99800 27354  
ramaswami.lakshman@in.prtm.pwc.com

**Italy**  
Andrea Samaja  
Tel: +39 0266720555  
andrea.samaja@it.pwc.com

**Japan**  
Masahiro Ozaki  
Tel: +81 3 5326 9090  
masahiro.ozaki@jp.pwc.com

**Middle East**  
Anil Khurana  
Tel: +97143043100 (ext. 3652)  
anil.khurana@ae.pwc.com

**The Netherlands**  
Sander Kranenburg  
Tel: +31 088 792 5309  
sander.kranenburg@nl.pwc.com

**Nordics**  
David Skov  
Tel: +46 0723 530534  
david.skov@se.pwc.com

**Portugal**  
Vera Oliveira Santos  
Tel: +351 213 599 447  
vera.oliveira.santos@pt.pwc.com

**Russia**  
Alexander Ordinartsev  
Tel: +7 495 967 6394  
alexander.ordinartsev@ru.pwc.com

**South Africa**  
Elmo Hildebrand  
Tel: +27 11 797 5192  
elmo.hildebrand@za.pwc.com

**South Korea**  
Glenn Burm  
Tel: +82 2 709 0394  
glenn.burm@au.pwc.com

**Spain**  
Nicolas Borges Marcos  
Tel: +3 491 5685 262  
nicolas.borges.marcos@es.pwc.com

**Switzerland**  
Matthias Memminger  
Tel: +41 58 792 13 88  
matthias.memminger@ch.pwc.com

**United Kingdom**  
Huw Thomas  
Tel: +44 0 20 721 33758  
huw.a.thomas@uk.pwc.com

**United States**  
Robert Shelton  
Tel: +1 408 817 3700  
rob.shelton@us.pwc.com

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