



Commercialize to win

**How trusted analytics can
drive success for traditional
telecommunications players**



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Introduction

Traditional telecommunications players have to step up their game in data and analytics (D&A) if they want a lead in the digitization race. For these pioneers of electronic and digital communication, survival and success over the next 10 years rests, in large part, on their ability to accelerate the commercialization of their data and analytics (D&A) — both customer data as well as network and operational data, which comprise a vast and valuable trove of information.

Standing in the way, however, are some deeply-rooted challenges that often prevent telecom executives from trusting their D&A and the valuable insights they can gain from them.



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D&A key to telecom transformation

Telecom executives are well aware that their business models are being fundamentally and continuously disrupted. In a recent KPMG survey of 580 telecoms executives, most (79 percent) said they worry they are already seen by customers as just a 'fat pipe of bits'.¹ And they understand that D&A will be central to their efforts to transform. The same survey found that 80 percent of telecom executives see D&A as the key to creating real-time change in the way they serve their customers. So, the ability to compete in one of the most hotly competitive business environments calls for a transformation underscored by the rapid commercialization of D&A.

Success will be highly dependent, however, on determining the best approach to address critical trust gaps across their organizations, as less than half of telecommunication executives in a recent KPMG survey on building trust in analytics said

they had trust in the usage and deployment of their analytics.²

Many of the large players are making huge capital investments in technology and infrastructure but are seeing much of the value of those investments being usurped by nimbler over the top (OTT) rivals such as Google, Netflix and Facebook. It could be argued that these capital investments represent a huge risk, given telecom executives' lack of trust in their data, yet they intuitively understand the value that D&A could deliver to their top line. Most telecom players are already building up strong capabilities in areas such as customer value management and social media monitoring. Many are also keen to explore how they might monetize the data that travels over their networks to deliver new services, not only to their traditional customers but also to new markets.

¹ *Powering a connected world. Disruptive Technologies Barometer. Telecommunications sector*, KPMG International, December 2016

² *Building Trust in Analytics, Breaking the Cycle of Mistrust in D&A*, Global Data & Analytics, KPMG International, October 2016.

Building value

A key challenge of commercializing customer data is understanding how best to address the 'creepy line' (the boundary where consumers feel that the use of their personal data with analytics is intrusive or creepy).

In recent years, most sectors have assumed that the position of the 'creepy line' is broadly set by demographics. Research conducted by KPMG in the UK suggests that, on average, around 50 percent of all telecom customers are already comfortable providing their data as long as they feel they are getting something in return.³ Millennials, in particular, are willing to share personal data. However, for many baby boomers, sharing personal data, regardless of the reward, is a turn off. But the line is being continuously redrawn.

New, emerging influences are affecting individuals' trust in the accuracy of the information they

receive, such as the rise of fake news websites and feeds on various social media channels. The tighter link between data privacy, ethics and reputation means that the 'creepy line' will become increasingly difficult to pin down for any single demographic. Regulation related to data usage is also vague and rapidly evolving. In addition, there is often a significant divide between the rules that telecom players must follow versus those that their disruptive competitors must comply with.

Despite the increasing significance of data privacy and information integrity issues, telecom executives recognize that anonymized customer data holds the key to a range of growth opportunities. Tight control over ethical risks can open up new insights into what customers want and can also be used for commercializing customer-based insights from OTT services.⁴



³ *Gateway to the connected world*, KPMG in the UK, November 2016

⁴ At the time of this article's publication, the US Senate and Congress voted to nullify landmark legislation governing broadband Internet privacy protection. The law will loosen restrictions on how internet service providers, including telecom and cable providers, can use customer data.

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At a time of shrinking margins, widespread infrastructure investment requirements and uncontrolled disruption, telecom executives can't afford to be making decisions based on information that is considered suspect, regardless of its underlying trustworthiness. //

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With the huge capital investments made in high-speed infrastructure, there's a clear opportunity for telecom players to leverage their operational data for commercial purposes. OTT providers are gaining tremendous value from those investments. To recoup some of that value, analytics-driven models could be applied to leverage operational data for the purposes of developing expertise in strategic growth areas of the business.

For example, telecom service providers still rely on customers to report troubles with a landline phone or broadband service, which often means deploying a technician to the home to repair the problem. With so much network data readily available, service providers

have the ability to troubleshoot and address potential customer technical issues ahead of time. This is a good example of how service providers can better leverage network data to enhance the customer experience.

Many are already starting to make early yet important progress on the operational side. As organizations led by engineers, most telecom companies quickly recognized that D&A could vastly improve their efforts to optimize their networks. Telecom procurement teams are integrating D&A into their processes and some are already applying robotic process automation (enabled by sophisticated D&A) to reduce their operational complexity and overhead.

Filling the D&A trust gaps to accelerate success

However, progress seems slow. Most telecom companies have been held back from the big opportunities of commercializing their data by a series of weighty challenges. Telecom executives cite several practical barriers, in addition to 'creepy line' concerns, mostly a result of their massive legacy IT estates and perhaps also a long-entrenched engineering-driven culture. Telecom companies have struggled to integrate their vast and highly-fragmented technology stacks, align their disparate views of the customer and integrate their billing systems. The tremendous volume of data also presents a layer of complexity that acts as a barrier to digital transformation.

These challenges are driving up a level of uncertainty and pushing down the internal trust that is necessary to support innovation.

Few decision-makers fully trust the data and insights they are receiving. Less than 25 percent of telecom respondents to the KPMG D&A survey said they have a high level of trust in the effectiveness of their analytics and just 37 percent have trust in the way they measure the effectiveness of their analytics.⁵

Our survey also found that trust varies across the D&A lifecycle. Interestingly, trust is strongest at the beginning of the cycle (at the data sourcing stage) but falls apart when it comes to implementation and the measurement of its ultimate effectiveness. This means that organizations are unable to attribute the effectiveness of D&A to business outcomes which, in turn, creates a cycle of mistrust that reverberates down into

⁵ *Building Trust in Analytics, Breaking the Cycle of Mistrust in D&A*, Global Data & Analytics, KPMG International, October 2016

future analytical investments and their perceived returns.

This is a concerning issue for telecom executives. It essentially means that key decisions related to massive capital outlays, critical customer campaigns and vital network optimization investments are being made based on

information that few decision-makers actually trust. At a time of shrinking margins, widespread infrastructure investment requirements and uncontrolled disruption, telecom executives can't afford to be making decisions based on information that is considered suspect, regardless of its underlying trustworthiness.

The four anchors of trusted analytics

Within our global KPMG Lighthouse — Center of Excellence for Data and Analytics, we have spent considerable time identifying and exploring the factors that impact trust in analytics. What we have found is that trust in analytics, as with trust in products or people, is often driven by a combination of two

things: perceived trustworthiness and evidence of its actual trustworthiness. Unfortunately, neither is easily assessed.

Our approach to assessing where the trust deficits are within an analytics lifecycle is based on four key anchors that underpin trusted analytics: quality, effectiveness, integrity and resilience.



Source: *Building Trust in Analytics, Breaking the Cycle of Mistrust in D&A*, Global Data & Analytics, KPMG International, October 2016

1. Quality: Are the fundamental building blocks of D&A good enough? How well does your organization understand the role of quality in developing and managing tools, as well as D&A?

2. Effectiveness: Do the analytics work as intended? Can your organization determine the accuracy and utility of the outputs (of D&A)?

3. Integrity: Is the D&A being used in an acceptable way? How well-aligned is your organization with regulations and ethical principles.

4. Resilience: Are long-term operations optimized? How good is the organization at ensuring good governance and security throughout the analytics lifecycle? Does D&A help influence long term strategy?

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Next steps for growth

While there are no roadmaps or software solutions for driving trust, we believe that there are industry best practices that organizations should consider and adopt. Based on our experience, here are 10 recommendations that should help telecom executives improve trust in their analytics and, in doing so, create the right environment for data commercialization and future growth.



Start with the basics: assess your trust gaps

Undertake an initial assessment to see where trusted analytics is most critical to your business and, for traditional players, it means a self-assessment operationally, culturally and technologically.



Build expertise: develop an internal D&A culture

Your D&A people are critical to raising the wider understanding of D&A across the organization. Identify gaps and opportunities in your current capabilities, governance, structure and processes. Acquire talent across the organization with data science credentials.



Get the house in order: build operational capability

Create capability and use D&A to define a framework for performance improvement and use those key learnings to create external value.



Encourage transparency: open the 'black box' to a second set of eyes

And a third. There are many potential actions to help improve D&A transparency. You may want to establish cross-functional teams, third-party assurance and peer reviews, use wiki-style sites, encourage whistleblowers and strengthen QA processes as valuable 'guardians' of trust.



Create purpose: clarify and align goals

Ensure that the purpose for your data collection and the associated analytics is clearly stated. Determine the purposes of various data sources to improve performance.



Take a 360-degree view: build your ecosystems, portfolios and communities

To drive trust through the organization, you will need to look beyond the traditional boundaries of systems, organizational silos and business cases. Consider establishing a D&A center of excellence that includes partnerships and alliances with third parties to create your analytics value chain.



Identify the line: understand customer expectations

Create consensus within the organization about the permissible use of customer data. Seek to enhance the customer experience while maintaining integrity in your relationship with customers.



Drive innovation: encourage experimentation

Create a model for D&A innovation. Allow D&A teams to push the boundaries of innovation and try several paths without excessive fear of failure.



Raise awareness: increase internal engagement

Building awareness and understanding the risks, benefits and cost of D&A among business users is critical to breaking the cycle of mistrust. Build awareness around pricing, both internally and with customers.



Be brave: see the commercial opportunity

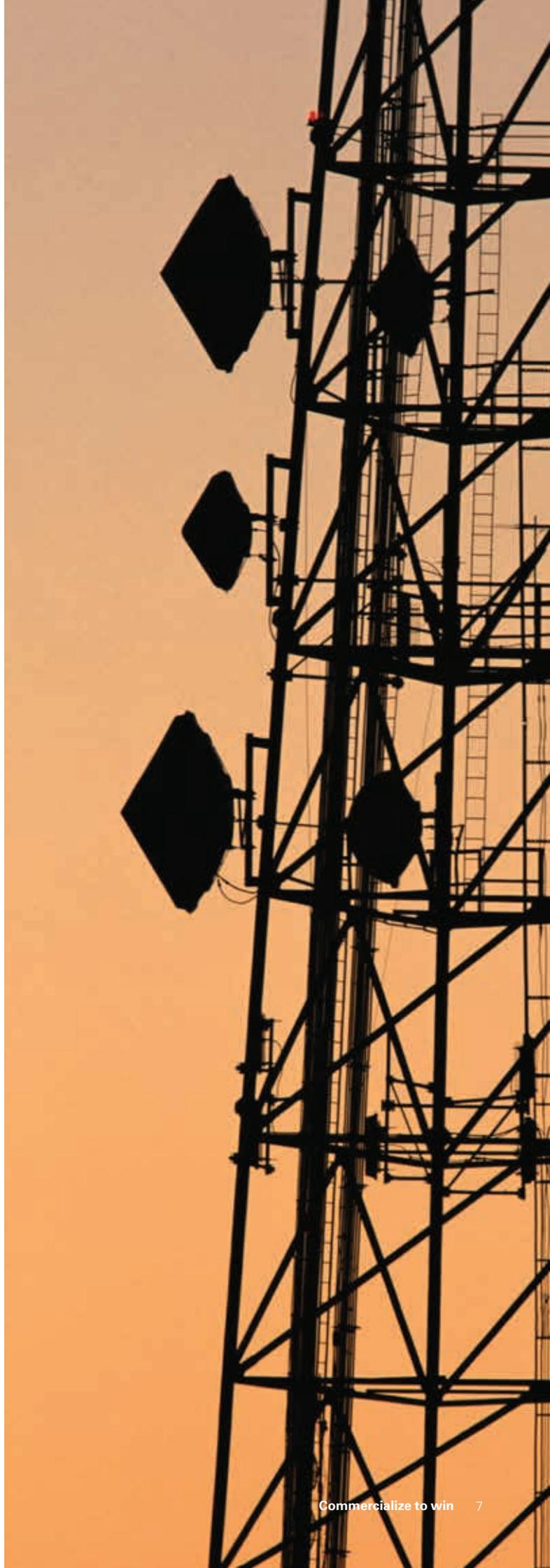
Look for new and untapped opportunities to commercialize D&A, both inside and outside of the organization. Have courage to move forward boldly with the proper use and application of analytics.

Please join us in the discussion on LinkedIn or Twitter @KPMG.

About KPMG Global Data & Analytics

In a global environment defined by constant disruption, business leaders need D&A they can trust to inform their most important decisions. KPMG Data & Analytics has earned that trust with an evidence-based, business-first approach that's at our core. For more than 100 years, we have worked across industries to help our member firms' clients address their long-term, strategic objectives. And, as an internationally regulated accounting and professional services firm, our member firms have an unwavering commitment to precision and quality in everything we do.

KPMG International was recently named a Leader among insights service providers in *The Forrester Wave: Insights Service Providers, Q1 2017*. KPMG is noted for having "cracked the code for balancing business and technology expertise" and for being "on the forefront of innovation." The ranking places KPMG at the forefront of other players in the insights service providers space and reflects the strength and depth of KPMG's D&A capabilities across tax, audit and advisory, including the firm's market-leading ability to deliver D&A solutions to its clients.



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