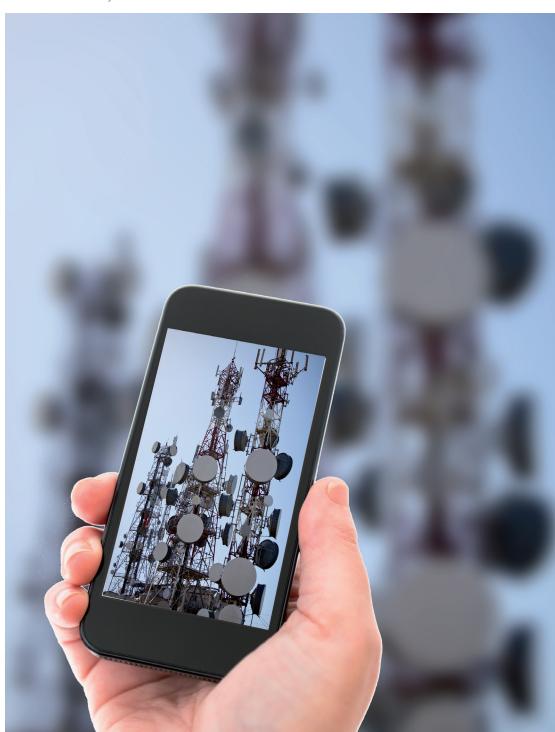
# Overwhelming OTT: Telcos' growth strategy in a digital world

**Telecoms** January 2017



**Authored by:** Niko Mohr Jürgen Meffert

## Overwhelming OTT: Telcos' growth strategy in a digital world

Once at the vanguard of the digital revolution, incumbent telcos are now asking themselves if digital is a threat or an opportunity to their existing business models. A strategy focused on operational efficiency is a clear no-regrets move in helping traditional telcos remain competitive in a sea of newcomers. Beyond this, incumbents can lay the groundwork for innovative B2B opportunities related to their core competencies. Discussions with a number of C-level telco leaders reveal that many creative ideas are already out there, so, for traditional telcos, the name of the game is excellence in execution.

As digital proliferates the telecom industry, incumbent telcos find themselves in the middle of a paradox. On the one hand, "thinking digital" is deeply embedded in their business models. They are, after all, not only providers of their own digital products and services, but they are also enablers for other sectors by providing the essential connectivity infrastructure for functioning and growing in the digital economy which results in a growing demand for broadband access. Also, it is forecast that the number of digital customers will skyrocket globally, and intensity in terms of time spent using digital platforms as a means of communicating will increase over the next few years. At the same time, consumer behavior regarding traditional communication services is changing, and the total consumer spend on these services is expected to decline even while overall communications activity grows. Finally, as technological breakthroughs accelerate, more and more new digital natives are entering the core telco market with innovative business models and technologies, leaving many incumbents to wonder if they can keep up or if they will be displaced.

#### THE GROWING FORCE (AND CHANGING FACE) OF DIGITAL

There are 2.5 billion digital customers globally who are under 25 years of age. What characterizes this group is the fact that they are "always on" and that they show a different usage behavior compared to that of the traditional "analog" consumer. On average, these young digital users spend 315 minutes online each day (vs. 126 minutes for customers over 25 years). More than two-thirds of this group is on YouTube daily, and

Digital is enabling the rise of OTT and pushing telcos to the margins of voice and data provision

41 percent of 18- to 32-year-olds in the US use video messaging service Snapchat for 25 to 30 minutes per day.

More than just an enabler of entertainment and social communication, digital is an instrument that helps this youth and young adult demographic "take care of business," with 45 percent using social media as their primary platform for customer service. In addition to digital's popularity as a preferred way of handling business, there is the trend of "mobile-only" Internet access. For example, over half of all active Facebook users access their accounts solely through their smartphones. Together, these trends - digital business and mobile access contribute to the projection that by 2019, over 2 billion users will make payments via mobile devices. Overall, this will result in an increase in the absolute number of digital customers as well as in a massive increase in the amount of time that consumers spend when using communication and broadband services globally. According to Ovum, communication intensity in terms of time spent will grow by 63 percent over the next 10 years.

#### Cannibalizing voice and messaging - offering more for less

As the overall digital market grows - an additional billion middle-tier customers for telcos, mainly in emerging markets, is expected by 2025 - the door for new over-the-top (OTT)

entrants is opening. These digital natives are offering the same staple services of voice, messaging, and video calls that used to be the domain of traditional telcos. In particular, OTT players like Skype, Apple's FaceTime, Google Hangouts, WhatsApp, and Tencent's WeChat or Tencent QQ threaten to cannibalize these staple offerings with innovative, easy-to-use, and even more attractive messaging and communication services.

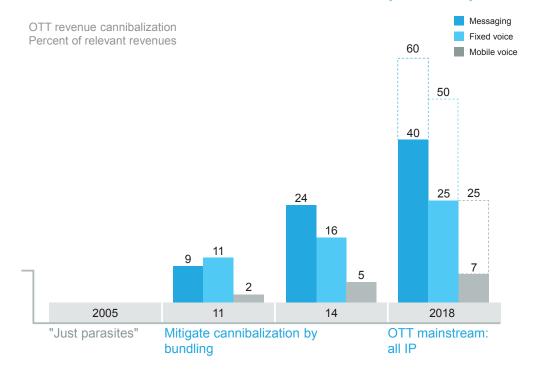
Just a few years ago, messaging, fixed voice, and mobile voice services from OTT players accounted for 9, 11, and 2 percent of relevant revenue, respectively. Several scenarios run by McKinsey & Company reveal the possibility of a jump in share for each of these services. In the most aggressive scenario, the share of messaging, fixed voice, and mobile voice provided by OTT players could be at 60, 50, and 25 percent, respectively, by 2018 in an all-IP environment (Exhibit 1). As those service offerings are being built on innovative business models, they will be available to users at a much lower price than traditional telcos are able to offer. According to Ovum, this will likely result in a drop in spending on traditional communication services by 36 percent over the next 10 years, further pushing incumbent telcos to the margins of voice and data provision.

#### Increasing demand for communication infrastructure - broadband access hype

"Thinking digital" is deeply embedded in telcos' business models. They not only provide their own digital products and services, but also the essential connectivity infrastructure that allows other sectors to function and grow in the digital economy.

The digitization trend is currently challenging every sector in industry and society. In almost all cases it is having dramatic, if not disruptive, effects on existing traditional industry dynamics and business models. Hence, all companies and institutions will have to think about how

Exhibit 1 OTT's share of traditional telco services will dramatically increase by 2018



SOURCE: Ovum; McKinsey analysis

to deal with this digital revolution and what their role in the newly arising digital ecosystems might be. Digital is all about data, but its full value can only be delivered when adequate IT and technology form the infrastructure that seamlessly connects that data and enables its exchange – anytime and anywhere. This growing demand for connectivity will require companies to have broadband access and a gigabyte or high-speed infrastructure, which would result in a rise in spending for ubiquitous broadband access.

As we also strongly believe in the rise of the Internet of Things (IoT) and Industry 4.0 as major drivers of this digital revolution, we can expect to experience an increasing demand in machine-to-machine and cloud services. McKinsey estimates that IoT's potential economic impact on factories will rise to as much as USD 3.7 trillion a year by 2025, mainly from productivity improvements, including as much as 20 percent in energy savings and 25 percent in potential labor efficiency improvement. To deliver this value, IoT envisions a world of connected devices that goes beyond mobile phones and smart watches. Everyday objects would be linked, i.e., able to send and receive data to and from each other. This level of connectivity would require additional, related IT and infrastructure services, which would further drive telco revenues.

#### Value chain takeover - new technologies and increasing competition

Market forecasts are predicting increasing margin pressure but no sea change in terms of fundamentally questioning the relevance of telcos in the future. There is, however, something going on in the traditional telco value chain and competitive landscape that is jeopardizing the existing telco business model. Not only are we experiencing increasing competition between traditional companies – i.e., telcos, cable providers, and MVNOs – but new OTT entrants are also cannibalizing services, and Internet and other tech giants are moving onto the traditional telco and media terrain as well. Google, Microsoft, Amazon, Apple, Baidu, Samsung, and Tencent as well as pure tech companies like IBM, Cisco, Huawei, and ZTE are all growing their presence across the traditional telecom's value chain with innovative technologies – from network and service through devices and operating systems to applications and media. And, to make things even more challenging, many large and medium-size companies – telcos' traditional customers – are starting to build their own infrastructures.

OTT players are offering core telco services like voice or messaging, and the media space is becoming their domain. Tech and Internet companies are also increasingly active in growth areas, like cloud space and services, competing with telcos for clients and revenue. They are tying customers to their own ecosystems, while making reliance on traditional operators a thing of the past. With carrier-neutral connectivity (e.g., e-SIM), many tech and Internet companies are enabling seamless changes between operators and eliminating the hassle of changing telecom providers. Hence, digital players are systematically attacking existing telco profit pools and will continue to do so – eating up telcos' revenues and margins. This makes differentiation purely on B2C products for traditional telcos a highly questionable proposition in the future.

In addition to these revenue-eroding trends, regulatory developments – especially in Europe – have cut down roaming revenues dramatically. All told, the opportunities that newcomers, tech, and Internet players are capitalizing on may slow growth for traditional telcos, costing them upwards of USD 300 billion. Worldwide, CAGR for traditional telcos is estimated at only 0.7 percent through 2020. For many telcos, largely in developed markets, the outlook is especially disappointing with projected negative growth. Telcos in Western

Europe and in Central and Eastern Europe are facing -1.5 and -1.3 percent average growth, respectively, over the next four years, while those in North America are expected to barely even be treading water with growth at only about 0.3 percent.

Additionally, these new entrants - with their global reach and a focus more on software and service than on hardware and infrastructure - also enjoy significantly higher stock valuations than do incumbent telcos. This is due to the fact that their growth potential is seen as much higher than that of those traditional incumbents continuing to operate under their existing business models.

#### **IMPLICATIONS AND OPPORTUNITIES FOR TELCOS**

For traditional telcos, this disruption, enabled by digitization, is anything but ordinary. Developments in digital technology threaten their current investments and put their cost baseline under significant pressure. New competitors are entering the core space of telcos, which will reshape the existing company landscape. In addition, telcos will continue to be forced to make major investments in future network technology. But the cost of just doing this alone is expected to result in a drop

Thriving through digital means the pursuit of new growth areas and "superslim" operations for telcos

in revenue in the order of 15 to 30 percent. Nevertheless, the growing importance and demand for connectivity and broadband access will ensure that there will be some growth opportunities out there, too.

To remain relevant in an increasingly digital space, incumbent telcos are advised to consider two strategic moves and, if appropriate, take immediate action: 1) make the core business "super-slim," cost efficient, and more agile and 2) identify new growth areas in the space that combine the great potential of digitization and telcos' existing core competencies.

#### The "super-slim" telco – a no-regret move

Given the mounting pressure that telcos are experiencing - particularly in Europe, where CAGR was -1.8 percent between 2014 and 2016 - seeking greater efficiencies in core areas and establishing a "super-slim" telco are no-regret moves. But to get there, telcos will need to rethink their operating models.

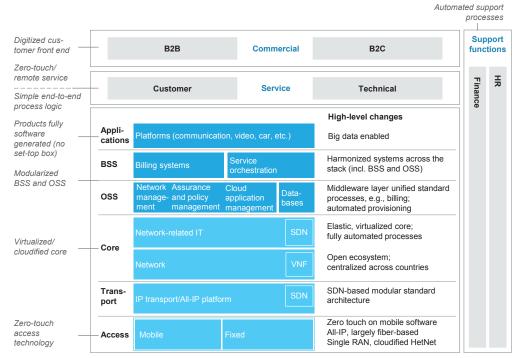
Transforming business models to optimize efficiency hinges on the implementation of digital in B2B, commercial, and B2C and spans all processes from marketing and sales through network all the way to customer support. Especially areas that are driving the highest costs,

Telcos leveraging digital to optimize efficiency have improved margins and cut operational costs like the network technologies, need to be reworked and moved into an IT-centric and more software-driven environment. Such a move should reduce related baseline costs by 30 to 70 percent, improve time to market and agility, and enable flexibility and selfprovisioning capabilities - but usually takes some time. Also, telcos can learn from other leading pure digital players and pursue

developments to, for example, completely digitize their customer front ends (including service), develop and deliver products that are completely software generated (i.e., no in-home hardware), and fully automate processes, such as billing and service coordination (Exhibit 2).

In this area, some telcos are already making progress. But the real benchmarks can be found within the crowd of pure digital players, who have learned to rethink their processes completely, making them digital, extremely agile, and cost efficient.

Exhibit 2 Digitization, modularization, and automation are key to telco ops efficiency



BSS: business support systems, OSS: operations support systems, SDN: software-defined network VNF: virtualized network functions

SOURCE: McKinsey analysis

#### Business opportunity in B2B

While the odds may be stacked against telcos in reclaiming the pole position in the B2C space, the good news is that telcos can capture new business opportunities in B2B, as this space is just beginning to develop. Here, specifically, telcos can leverage their infrastructure advantage – combining this with state-of-the-art digital technology – and position themselves as the backbone of fast-growing digital ecosystems – especially around loT, security, and Industry 4.0. This position spans the categories of network, product, and services and offers telcos the possibility of taking leading (sometimes exclusive) roles in, for example, intelligent networks, ICT solutions, cloud services, analytics, IoT and security solutions, billing, and customer relationship management. Evidence of this as a potentially attractive space can be seen in the growing adjacencies-related announcements of operators in IT and technology in their quest to meet the customer's appetite for ICT solutions and IoT. Unfortunately, experience shows that telcos have historically only found success in transversal products (e.g., security, IoT, cloud services for regional SMB segments). In all other areas, telcos have developed great ideas, but have failed to successfully execute them.

One example of the connectivity and value-added solutions that telcos might explore could be playing a dominant role in smart city infrastructure. The existing infrastructure needs to be transformed into a smart infrastructure (e.g., traditional passive pipes into self-regulating active pipes or street lights into intelligent street lights). Additionally, the whole smart city infrastructure needs a level of connectivity on the order of a gigabyte as well as the capacity to provide additional services, like billing or analytics.

A second example of telcos' infrastructure opportunity is the role they might play as the platform for Industry 4.0 or IoT. In this case, a network operator would serve as the backbone of the complex data flow that links a) machine sensors to back-end services, such as analytics or cybersecurity, and b) transportation supply chain infrastructure to navigation, factory floors, social media, and logistics apps. This could be highly attractive because machineto-machine revenues are projected to grow by double digits over the next few years. Other examples for telcos include the provision of healthcare infrastructure, platforms for smart mobility, or enabling B2B2C consumer-retailer networks.

While increasing digitization presents B2B opportunities for traditional telcos, leaders should be aware that the competition in this infrastructure/value-added space will be intense. Players from across telecom and other sectors will pursue these revenue opportunities – however, only a select few will capture the value and move further into the enterprise space.

Competing with digital natives in B2C in the areas of voice, video, and messaging might be an uphill battle, yet even here some options do exist for telcos in B2C. Combining their core competencies with opportunities in digital technologies, telcos might consider options for offering connected platforms for "smart home," self-marketing, as well as secure cloud and data services for individual consumers.

The digital B2B market for traditional telcos is in its early stages but fast-growing and expanding. Large OTT players, however, are not sleeping – they have already started to look beyond the pure B2C space into B2B and are trying to conquer this space, too (Exhibit 3). For example, Amazon, Microsoft, and IBM – the largest cloud services players by far in the Americas/Europe – are making B2B inroads. Of these, Amazon is already positioning a B2B sales platform. Huawei, Alibaba and others are following suit out of Asia, as traditional telcos are currently asking for their inexpensive services. And while some tech and Internet companies have already started to discover this B2B space, telcos have yet to enter this arena. Most telcos know about the B2B opportunity, including its inherent challenges, but are having a hard time operationalizing it. So, the time for telcos to act

Exhibit 3 Dominant OTT and tech players in both the Americas/Europe and Asia in the B2C and B2B space



SOURCE: McKinsev analysis

and fix their execution problem is now. Without swift action, they will almost certainly fall behind once again because OTT and tech players will do everything in their power to dominate the B2B space.

The telecom industry is on course to becoming unrecognizable within 10 years' time in a "do-nothing" scenario. The global market for potential customers is still growing, but the forecast for traditional telcos is for low revenue growth and shrinking margins due to increasing competition from OTT and technology players. Despite the inevitable change, opportunities exist for those that are willing to accept the challenge and initiate change. To survive in an environment where digital dominates, telcos must create a "super-slim" and efficient core business. To thrive, they will need to strategically define and aggressively pursue growth areas. Many have come up with innovative digital ideas, but ideas will not be enough. Telcos have already ceded much of the value in B2C to OTT and tech companies; without a demonstrated commitment to excellence in execution, they risk losing out on the B2B opportunity to these same players as well.

### CONTACTS

**Niko Mohr** is a Partner in McKinsey's Dusseldorf office. niko\_mohr@mckinsey.com

**Jürgen Meffert** is a Senior Partner in McKinsey's Dusseldorf office. juergen\_meffert@mckinsey.com