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Hello, operators? This is your age of disruption calling

Difficult times for operators call for questioning old orthodoxies to win

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Difficult times for operators call for questioning old orthodoxies to win

For the better part of a decade, telecom companies have suffered through declining revenues, cash flow, and return on investment just as tech companies like Google, Facebook, Amazon and others have mushroomed by building their businesses on the operators' own infrastructure. While these tech visionaries have enjoyed well over a $1 trillion in combined market-cap growth by innovating and thinking differently and adeptly, telecom companies have tried to compete by implementing the same old survival tactics: cutting costs, reducing the workforce, and timidly entering into new business adjacencies. The trouble is that playbook no longer applies.

It's time the telecom companies embrace this new reality and rethink the key orthodoxies that have shaped their industry since the first phone call was made about 140 years ago. If not, the alternative is dire. Yes, the stakes are that high.

We've seen this before in other capital-intensive industries. The airline industry, for example, despite incredible growth in travel during the early part of this century, destroyed economic value until 2015 when, for the first time, the industry-level average return on invested capital (ROIC) was just in excess of its cost of capital. [1] This return to economic profitability was achieved through a combination of falling fuel prices; significant industry consolidation, especially in the US; and the growth of ancillary revenues, such as checked-baggage fees. If global operators were to follow the airline industry's prior trajectory, the implications could be dramatic. Not just for the operators that would see declining investment as capital and talent move into sectors with superior returns but also for current and future over-the-top (OTT) players, such as Amazon, Apple, Facebook, Google, and Netflix, who rely so heavily on the operators' networks and investments. Digital and analytics may just be the plunging-fuel-price magic bullet to offset the trends that threaten operators' future; however, even then, industry consolidation and new service revenues are likely to be required for operators as well.

We see the need for a fundamental transformation of the operator industry, rooted in and built upon these companies' new strengths and value. The OTT industries and companies like Google and Facebook have generated enormous value and opportunities, not because they improved existing industries, but because they created brand new ones, using telecom infrastructure to do so. So much of the value of these new companies comes from the data they collect, analyze, and monetize. Think about it this way: if Google and Facebook know everything there is to know about their users, the operators actually know such information first, since everything must travel through the operators' networks on their way to the final destination.

There is enormous opportunity for operators to explore advanced methodologies, including machine learning, digitization, analytics, and artificial intelligence, to structure much of the unstructured data they host to create a far better, even completely new, experience for their own customers. This is less a natural transition and more a massive transformation. Operators must view it the same way to effect the necessary, meaningful, lasting, pioneering change. As such, we believe that now is the time to question long-held beliefs by reexamining four core orthodoxies that have driven operator behavior for the past 20 years:

1. What level of performance improvement is possible?

Over the last decade, operators pursued cost-cutting and operating efficiencies to squeeze out 3 to 6 percent in costs annually, often across the board and year after year. Be it through head-count reduction, capex optimization, or process efficiencies, this approach has been like drudging through mud: difficult and slow. Furthermore,

1 Economic performance of the airline industry," International Air Transport Association, June 2015, iata.org

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by cutting costs year after year, operators have become less attractive employers to top talent and much (if not all) of the gold-rush mentality of the 2000s has evaporated.

The advent of machine learning and other advanced-analytics techniques, combined with the ability to now digitize large numbers of operator processes, creates a new paradigm that allows for an unprecedented change in operator cost structure. Applying analytics to the vast customer data available to operators delivers new insights about needs and preferences and what may cause customers to leave. By digitizing processes, for the first time operators can act on this information both cost effectively and at scale, tailoring products, services, and interactions to individual customers. These new technologies are just as valuable in managing network infrastructure, guiding investments in new capacity, and adjusting wireless networks automatically.

While no single company has yet to exploit the full set of levers, our analysis suggests that a cost reduction of 30 to 40 percent and increasing cash-flow margins from 25 to nearly 40 percent is possible (see “A future for mobile operators: The keys to successful reinvention”). Whether incremental or dramatic, cost reduction alone can by its very nature only provide a short-term competitive advantage. It can, however, create the headroom necessary to invest in more sustainable sources of competitive advantage.

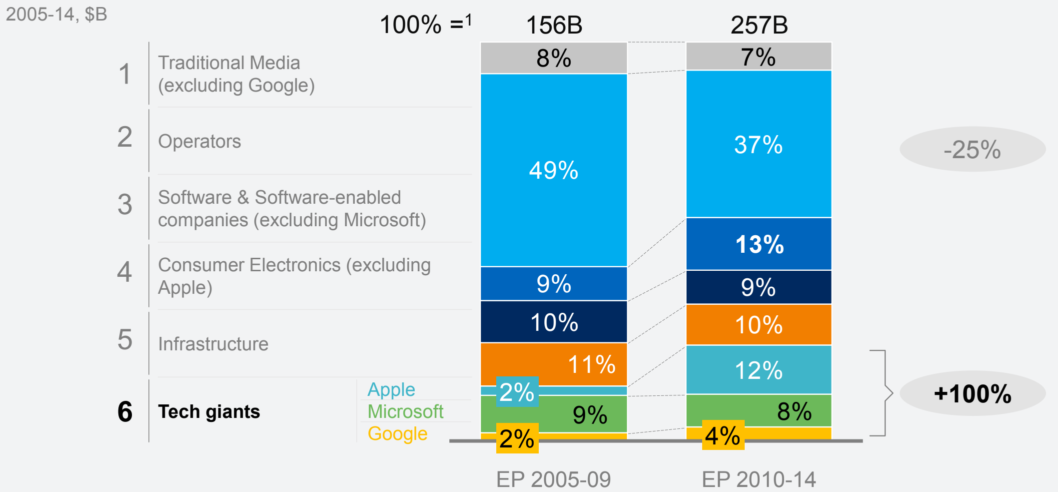
2. Who are my real competitors?

The overwhelming majority of the economic value that has been enabled by the communications industry over the last two decades has not been captured by operators, but by tech disruptors like Apple, Amazon, Facebook, Google, and Netflix. The economic profit share of three tech giants alone (Apple, Google, and Microsoft) across the global tech, media, and telecom sectors doubled from 13 percent in 2005–09 to 24 percent in 2010–14. These companies—including other OTT players—are not only redefining the customer experience but also now competing with operators for ownership of the customer relationship. What’s more, these tech players operate globally and benefit from the corresponding economies of scale—a marked contrast from the communications industry that is fragmented by national borders (exhibit).

Operators’ industry profit share is squeezed by tech giants and OTT players

Distribution of economic profit by Tech, Media and Telecom sub-sector

2005-14, $B



1 Includes TMT companies that may have shifted to adjacent markets (e.g., Payments companies)

SOURCE: McKinsey CPAT financial database

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Operators, therefore, will need to address the fundamental strategic question of where and how they want to compete going forward. Should operators continue to see other telcos and cable networks as their primary competitors—or are the real competitors for value and customer ownership the FANGs (that is, Facebook, Amazon, Netflix, and Google) and other OTT players? Take the US market as an example (any other market would equally do): if AT&T were to win 1 or 2 percent of the mobile market share from Verizon (or vice versa), how would that compare versus Google or Facebook introducing new targeted advertising to AT&T's or Verizon's customers? The latter is clearly a greater risk. Some operators are alert to the threat and making strategic moves to better compete against tech players – take AT&T's acquisition of DirecTV and pending acquisition of Time Warner Cable, and Verizon's purchases of AOL and Yahoo.

But if tech giants are the greatest competitive threat to telcos, then what does this imply for how operators should view network sharing, joint-distribution networks, and bidding for spectrum? Could a multi-carrier partnership advertising platform compete? And what are the new propositions and services that operators need to develop—potentially jointly—to stand a fighting chance against the OTT players?

3. What should be the primary differentiators?

As the competitive landscape is redefined, so too are the sources of competitive advantage. According to old industry thinking, spectrum ownership, network assets, and distribution channels were the chief sources of differentiation and value. This thinking pushed operators toward vertical integration and network-asset ownership, with many players still nervous about even small steps, such as network sharing, while failing to generate the necessary returns. Yet the disparity in profits between operators and tech giants showed that the pipes are not the chief source of value. In this new era in which the most industry value is migrating to the OTT space, there are three important areas where operators can specialize and differentiate:

- **Consumer insights:** Operators can learn from asset-light OTT players that are generating strong top-line growth and returns based on world-class understanding of customers. Deep customer insights enable operators to customize product offerings, tap new marketing channels, and ultimately offer better, more personalized service. Operators ought to reflect on the question, Can customer insights, understanding, and relationships become meaningful sources of additional, or even substitutional, value? This will undoubtedly require new forms of investments and talent, requiring other areas to yield investment funds, but given the plethora of unexploited customer data sitting with operators, it seems it is a chance too good to miss.

- **Customer protection:** Hand-in-hand with customer insights is an opportunity to offer customers much desired privacy and protection. While research shows that customers value more-relevant advertisements that reflect their personal interests, it also shows they want operators to protect their personal data, not sell it to third parties. In an era of growing concerns about security and data privacy, can operators serve as a trusted intermediary between consumers and advertisers? Are there opportunities to strengthen ties to customers, reduce churn, and grow revenue through security services, such as password, virus, and identify-theft protection?

- **Video:** Mobile video traffic is forecasted to grow 50 percent annually through 2020 to account for 75 percent of all mobile-data traffic,[2] yet operators largely don't offer attractive content or video-related business models, but leave this to players outside of the operator space. Even more alarmingly, OTT players operate on a global level, with

2 Ericsson Mobility Report, June 2017, ericsson.com.

massive economies of scale, while operators that compete in a handful of countries lack scale for much content. The video ecosystem is complex—and getting more complex as new use cases of creation and consumption and new disruptors emerge—but it is a space that operators need to understand well. While the winning strategy has not yet emerged and some options are expensive and risky, standing still will almost assuredly guarantee declining returns.

4. Does the historically defensive public domain and regulatory stance need to change?

Operators have traditionally been highly reactive and defensive in their public communications and in discussions with regulators. Leaving critics to tell their story for them, operators have often been portrayed as oligopolists that fleece consumers. This negative perspective of the industry, reflected in high regulatory hurdles, has made in-market consolidation nearly impossible, which is particularly important in Europe to gain the necessary scale.

Given the growing importance of their networks and new sources of competition, do operators need to engage in a more proactive and open approach to regulatory and public-opinion shaping, especially relative to tech giants and network neutrality? A stronger narrative would help position operators to make an affirmative case for consolidation or, at a minimum, for deeper network sharing.

Operators have a powerful story to tell: operators play a critical role in deploying and managing the infrastructure that is powering the digital economy, protecting against cyberattacks, and enabling new consumer experiences. Industry association GSMA estimates that in 2016 the total mobile industry made a contribution of approximately $3.3 trillion in value-added terms, equivalent to 4.4 percent of global GDP, taking into account the direct, indirect, and productivity impacts.

What's more, the myriad of new technologies under the rubric of 5G has the potential to unlock tremendous new economic growth by enabling, for example, smart cities, smart grids, autonomous vehicles, advanced robotics, and other use cases that utilize massive numbers of connected devices and require extremely high speeds and low latency.

Operators must continue to invest in network, spectrum, and ever-increasing population-coverage targets to realize the potential of these new technologies. Policy makers need to understand that unless operators can achieve greater returns on capital, this future might be delayed. And it's equally important for consumers to understand what they are paying for on a monthly basis—nearly constant access to data.

So what?

The appropriate way to change our perspective on the four orthodoxies above will surely differ by geography and possibly for each individual operator. However, after more than 20 years of persistent cost reduction, an intense focus on operational-performance improvements, and continued declining free cash flow and returns on invested capital, we believe operators need to question the traditional orthodoxies that have shaped the industry for decades. With ever-growing demand for the services they enable, operators have an opportunity to redefine who they are—their markets, services, and competition. Such reinvention is possible and beats never-ending competition for shrinking industry profits. Telecommunications is no longer only about operational excellence. It is increasingly a matter of vision and strategic choice.

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