AlixPartners

Disruption Insights

THE CONNECTIVITY TRAP

Disruption in the telecommunications industry

When it really matters.

In brief

DISRUPTION THEMES

– A saturated consumer market and intense competition are keeping prices low.

– Capital expenditures are accelerating as the next generation of technologies—particularly 5G—begins to get rolled out, requiring an additional $1.3 trillion of capex across the industry.

The environment is complicated by:

– Ongoing competition from a multiplication of sources

– Continued convergence of fixed and mobile technologies

– Regulatory constraints on consolidations and cooperation

IMPLICATIONS

– Radical simplification of legacy service propositions, systems, and operating models is a prerequisite to any transformation enabling telcos to be more competitive.

– A digitized customer journey and extension into the back-office functions can finally achieve integrated, data-based operations.

– Operators should seek to optimize new technology rollouts (like 5G) with a focus on monetizable propositions in the B2B sector and increased levels of collaboration or sharing.

– New revenue streams from 5G and elsewhere will be tough, but a transformed digitally enabled operator—with a healthy core—will be better placed to pursue adjacent business opportunities.

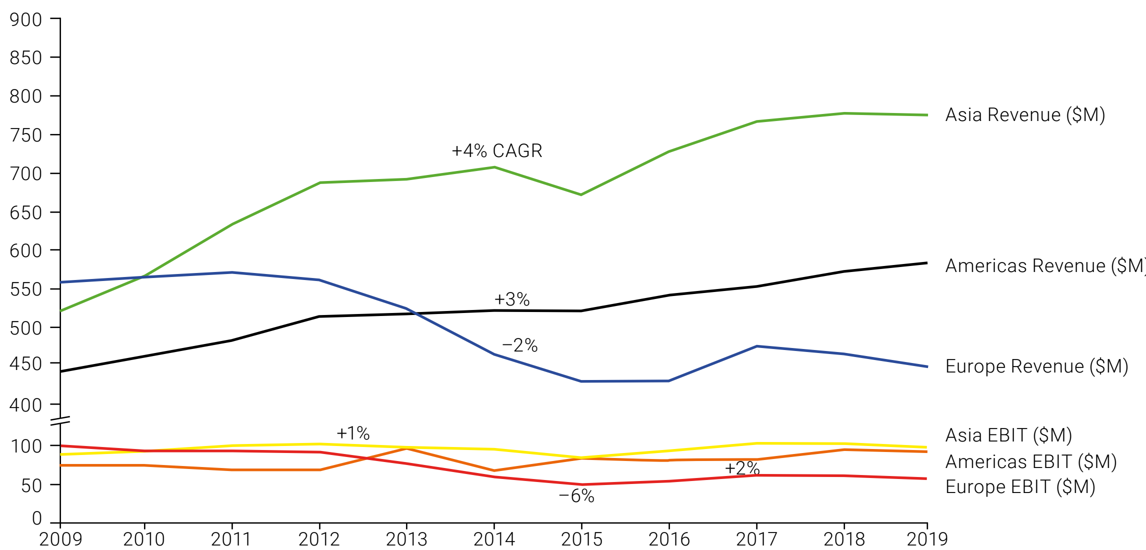
The connectivity trap

The connective infrastructure that is keeping consumers online, informed, and empowered is the primary accelerant of disruption across the industries we studied last year. However, the main enabler of that connectivity—the telecommunications industry—has been unable to fully take advantage of the disruption.

The networks that telecommunications companies provide have facilitated the growth of technology giants like Facebook, Google, and Amazon, whose networks are helping drive the complete reorientation of industries like retail and media. But telecommunications operators have not been able to extract the revenues from their own networks that others—especially technology companies—have.

That frustration has been caused fundamentally by a combination of strong competition, rising costs, and regulatory controls in much of the world. Consumers increasingly view telcos as providing commoditized services that compete primarily on price. And as a result, revenues and expenses have decoupled, negatively affecting profitability across the industry.

TELECOMMUNICATION INDUSTRY REVENUE GROWTH AND EBIT



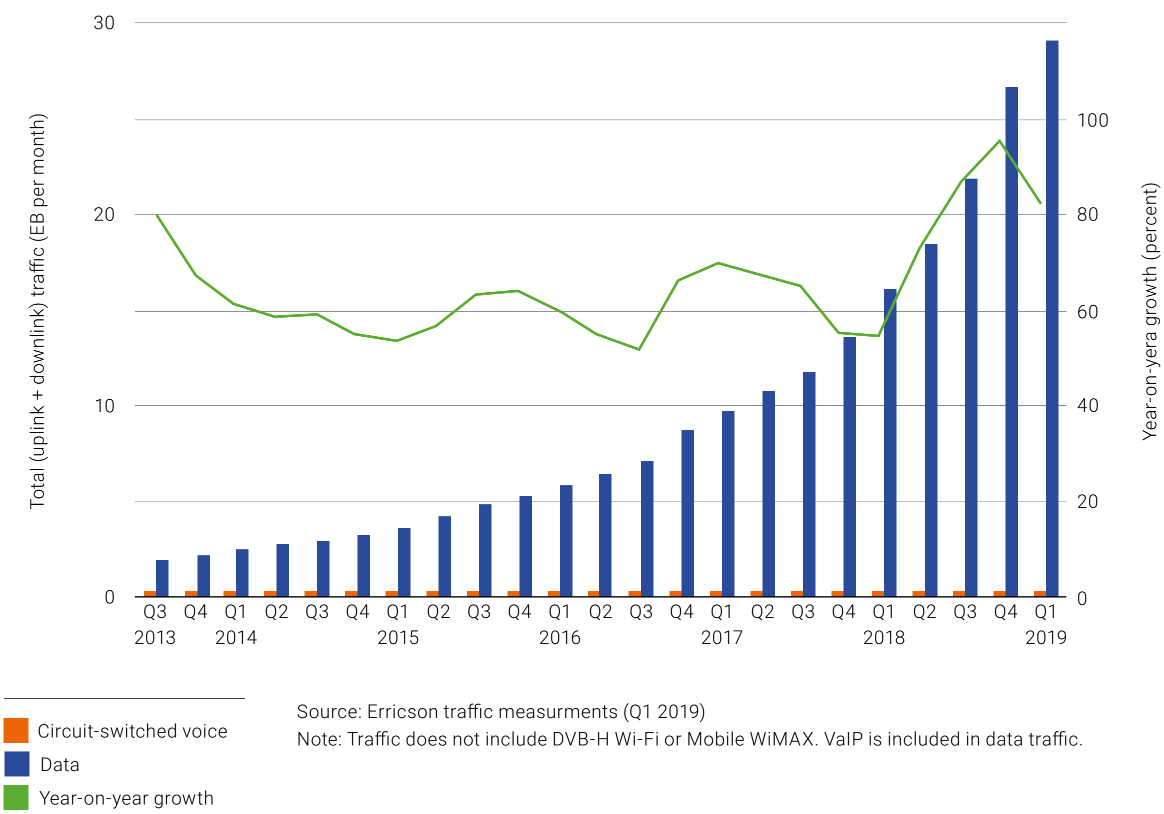
Demand is going up...

It is estimated that more than 5 billion people around the world have mobile phones and that more than half of those are smartphones, thereby keeping all the people who have them constantly connected. The average smartphone user spends almost three hours a day on the device, the processing power of which has increased 10 times in the past five years.[1]

In 2019, Facebook had 2.41 billion active global users.[2] More than 500 hours of video were being uploaded to YouTube every minute.[3] Each of Spotify's 232 million subscribers were streaming, on average, 25 hours of music per month.[4] Even as the number of mobile users stabilizes across most markets, demand on infrastructure does not because people are spending more and more time online, and they expect to use ever-richer services like video while they're on the move.

As a result, network traffic is growing at 30 to 40% per year. A majority—about 82%—of data usage continues to be through fixed broadband networks, but increasingly, consumers are using their mobile devices and networks to access all of the forms of content now available to them—whether streaming music or video, social media, online news, or digital commerce, to name a few.[5]

GLOBAL MOBILE TRAFFIC AND YEAR-ON-YEAR GROWTH (EXABYTE PER MONTH)



Source: Erricson traffic measurments (Q1 2019)

Note: Traffic does not include DVB-H Wi-Fi or Mobile WiMAX. VaIP is included in data traffic.

...as are costs

Massive investments in infrastructure are required to build networks with the flexibility to accommodate the growth in traffic. The investments are in the areas of spectrum licenses, fiber installation, and the newest generation of wireless network technologies, 5G. From 2019 through 2025, mobile operators around the world will spend about $1.3 trillion in capex, with more than three-quarters of that related to 5G, according to estimates by GSMA Intelligence.[6]

Wireless technology 5G promises faster speeds, larger data volumes, and greater reliability compared with 4G and may open up new applications for industrial or business Internet of Things like smart factories or mobile health. Indeed, 5G will likely have a bigger impact on businesses than on individual consumers, who are unlikely to perceive an obvious difference in performance with this new technology. Given strong competition for telecommunications services in much of the world, however, operators find it necessary to make those investments if they are to remain competitive and maintain market share.

No one wants to market themselves as offering the previous generation of technology.

Intense competition and regulation

Operators have generally been unable to pass the costs of their investments on to consumers because of the competitive environment in most markets. In Europe, regulators in Brussels have intervened to level the playing field among telecommunications companies and promote competition. Through a combination of market access and antitrust activity, European consumers enjoy a range of inexpensive service choices. Today, for example, users in France pay, on average, 27% less for telecommunications services than those in America do.[7]

Even in the United States, competition between the four primary operators has limited their ability to increase consumer prices. The US Bureau of Labor Statistics Consumer Price Index for wireless services fell almost 28% in the 10 years from 2009 to 2019.[8]

Companies in this industry are accustomed to competition not only among themselves—as mobile, fixed, and broadband services have converged—but also from new entrants that are unencumbered by legacy cost structures and traditional business models. Mobile virtual network operators (MVNOs) are gaining increasing market share in Europe—which represents more than a third of the market—in such countries as Germany and the Netherlands. In the world's largest market, China, regulators greenlighted MVNOs for the first time in 2019. In the United States, MVNOs represent less than 1% of subscribers, suggesting there is potential for substantially increased competition if regulators pave the way.

In addition, government actions are limiting sourcing options for key 5G network components. The US actions limiting Huawei's participation in 5G infrastructure will increase capex by limiting competition—from a lower-cost provider—in the network infrastructure market.

Soft-SIM technologies may replace traditional SIM cards with software applications that would perform all of the functions of a SIM card but enable consumers to select their network on demand. Consumers could then choose the best or cheapest available networks—without being locked into one provider. When soft-SIM technologies get released, mobile operators may resist for a time, but it's unlikely that they can do so for long. Inevitably, soft-SIM technologies will increase levels of competition and exert price pressure in an already challenging environment for mobile operators.

And some of the largest drivers of network traffic are cutting telcos out altogether. Amazon, Facebook, and Google have their own data centers, which are connected by their own fiber-optic infrastructures. Private networks account for about 60% of transatlantic data traffic, according to research firm TeleGeography. As WIRED magazine put it, "Put it all together and you can see a day when you're watching content that Google produced disseminated via infrastructure that Google owns on a phone that Google made using wireless service Google brokered."[9]

IS CONTENT KING (OR JUST ANOTHER WAY TO SINK CASH)?

As consumers have increasingly turned to their range of electronic devices to consume the wealth of content now available to them, telecommunication and broadband cable companies have struggled to find ways of capitalizing on their central role in the delivery of that content. As the value of Facebook, Amazon, Apple, Netflix, and Google has soared and as traditional media companies have begun offering their content direct to consumers via streaming services, the divergence between content and distribution has been placed in stark relief.

Both Comcast—with its acquisition of NBCUniversal and, subsequently, Sky in Europe—and AT&T, which acquired Time Warner, are making the calculated gamble that they can succeed by marrying content and distribution.

In justifying its acquisition of Time Warner in the face of activist shareholders in 2019, AT&T lauded the synergies the company believes can be achieved through combining businesses. The company's film and TV studios can produce the content. Its cable network—comprising TBS, CNN, and the Cartoon Network—can distribute it. Its satellite business, DIRECTV, can carry it into homes. And it can reach AT&T's wireless customers anywhere on their mobile devices.

The data AT&T collects through all of these points of distribution provides increased opportunities for targeted-advertising revenues. Bundled services, too, can help improve customer retention rates and reduce churn.

On the flip side, AT&T is entering an increasingly competitive and fragmented media marketplace. Rivals with deep pockets, like Amazon and Apple, are ramping up their streaming offerings. Some competitors, like Disney, combine their cash with extensive libraries, premium brands, and long and accomplished histories in running successful media companies.

For 2019, AT&T announced it had taken a $1.2-billion charge related to preparing its new HBO Max streaming service. At the same time, its traditional cable video business lost 4 million subscribers over the course of the year. However, the company did add 229,000 new wireless customers in the fourth quarter.[10]

Whether the integrated approach will be successful remains to be seen, but over the short to medium term, competitive pressures in pay TV are likely to mount.

Industry consolidation and regulatory control

A solution for the management of those escalating expenses and for expansions of service might be in the forms of mergers or partnerships between operators, and indeed, some companies have been pursuing that path, as evidenced by the announced merger of T-Mobile and Sprint in the United States. However, regulators have limited such activity in order to protect consumers from higher prices and less choice. Indeed, in the case of T-Mobile and Sprint, the US Justice Department is requiring Sprint to sell its prepaid business and spectrum to satellite provider DISH and provide DISH with access to T-Mobile's wireless network in order to preserve a fourth competitor in the US market.

In the United Kingdom, the sale of Telefónica's O2 to Hutchison was blocked in 2015 because of concerns that competition at the physical infrastructure level would become too reduced. That same year, the European Commission also blocked the merger of TeliaSonera and Telenor in Denmark, which would have reduced the number of mobile operators in that country from four to three.

Response from industry

Telecommunications operators around the world are at a fork in the road: On one hand, demand for their services will likely only increase, as will the costs associated with upgrading and maintaining services to meet that demand. But on the other hand, the competition is intense and will also likely only increase, thereby limiting the companies' pricing power.

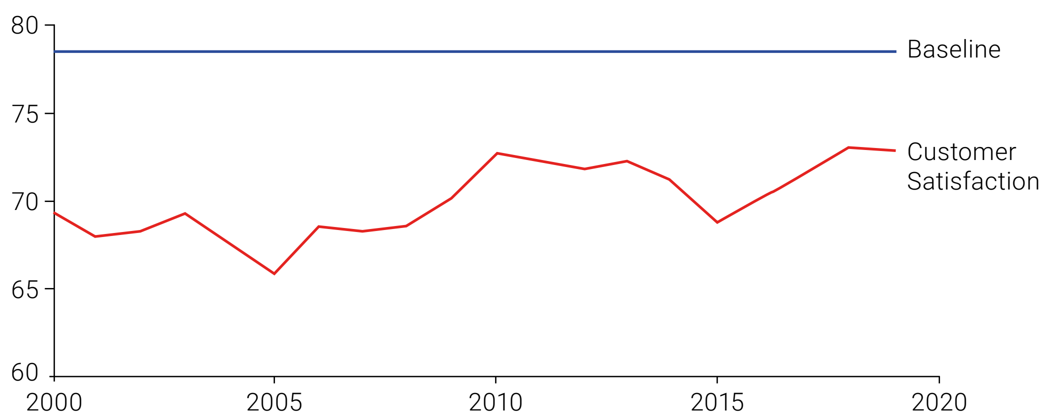
To compete in such an environment, operators must simplify legacy products and systems, digitize customer interaction points and processes, and seek to mitigate the vast costs of infrastructure with further cooperation with competitors. Increased revenues will also be a focus for many operators, but we believe the potential for most companies to do so in the current environment is limited.

Telecommunications companies that do not take those steps to realign cost structures and business models face a bleak future.

RADICAL SIMPLIFICATION

Through the years, telecom operators have accumulated unnecessary layers of complexity across their organizations and their product and service portfolios. In response to consumer demands, competitors' moves, and new technologies, telcos have been innovating—probably overinnovating—on the portfolio front more than ever. That innovation has led to a largely underutilized and commercially irrelevant set of service components and price plans that offer little value to customers. On the other hand, the labyrinth of complex portfolio elements that has resulted drives inefficiencies, delays, and dissatisfaction across the organization and among consumers.[11]

THE AMERICAN CUSTOMER SATISFACTION INDEX RATES THE US TELECOM INDUSTRY AS THE POOREST-RATED INDUSTRY



Simplification is essential. The reduction of technology costs and manual processes with fewer legacy systems all begins with first simplifying the offering to the customer—not just tariffs but also additional perks and promotions. A simple yet competitive portfolio would offer a limited set of transparent pricing plans built on top of fewer modular service components. Although that may sound straightforward, the trick to unlocking real efficiencies lies in changing how a business thinks about customer value propositions.

Reducing the complexity of a company's portfolio also leads to a reduction, or redistribution, of investments in the areas of marketing, technology, and training. New technology takes less time to bring to market, and operating expenses would be reduced. A simplified structure also frees management to focus on the core business. With fewer moving pieces, management can focus on what really matters.

Customers like it simple. Simplification leads to fewer customer service calls about billing complaints or for queries about underlying services and, ultimately, to happier and more-satisfied customers.

DIGITAL TRANSFORMATION

Many telcos continue their outmoded ways of interacting with consumers and their legacy infrastructures—including excess brick-and-mortar retail locations and staff—that lead to higher costs and ineffective outcomes. Digital channels offer ways to reduce customer management costs while improving customer engagement and experience.

Operators that have made coherent, customer-centric pushes to digitize customer interactions typically see a 30 to 35% reduction in customer interaction costs across all touch points. However, few operators are taking full advantage of such savings by taking a holistic view of their customers.

Far too often, telcos focus on developing digital capabilities—including apps and the website—in silos. Online channels get developed with more bells and whistles than needed, but customer uptake remains low. The right set of Web and app features is necessary but drives only about 40% of desired savings.

The key to success in digital transformation is its combination with radical simplification. Eliminating the complications from multiple tariff combinations, features, network types, and overvalued premium services paves the way for successful digitization.

By focusing on customers' usage, interaction histories, and preferences, companies can build a foundation for an enhanced customer experience. Such focus also ensures coherent and customized customer interaction across all channels. Companies should identify areas that are valued by customers and for which they are willing to pay a premium to make them profitable service additions on top of the basic core.

In 2020, it is no longer sufficient to digitize back-office processes. The extent of disruption in this industry necessitates starting at the front, applying a customer-centric approach, and defining the value for the customer. Anything that is not delivering on that value must be eliminated. This means adjusting channel-incentive structures, training, marketing, promotion, and pricing, followed by a simplification of customer service, billing, and finance. Network cleanup should be combined with the rollout of 5G or fiber.

Successful digital transformation also increases the number of opportunities to apply artificial-intelligence-enabled data analytics with a view to improve, or to create a completely new, customer experience.

OPTIMIZE NETWORK ROLLOUT AND BRAND PERCEPTION

Given the massive investments necessary to fully roll out 5G technologies and given the marginal improvement in user experience that can be gained, mobile operators should be asking themselves whether they can spread those capital expenditures over a longer time horizon.

Infrastructure cooperation within the industry offers another avenue to reduce capital expenditures. To do that, though, requires changing established attitudes toward asset ownership and management. It also needs agreement from regulators. By focusing on their true value-add for customers, telecom operators can move away from an operating model wherein they own and manage all infrastructure end to end.

Examples of that are the sharing of passive infrastructure such as towers and more-advanced sharing in rural areas where collaboration brings a superior service experience to consumers that strict competition rules would not allow. Unlike in the United States, active network-sharing agreements are commonplace throughout Europe, but 5G introduces a new wave of updates to existing collaboration models and introduces new ones (for example, the rural sharing model in the United Kingdom).

Operators should also look at how they can monetize their assets such as towers, which would generate significant cash injections to help lower the burden of new investment. Alternatively, coinvesting on fiber buildout with public bodies or private investors, rather than assuming the traditional 100% owner-operator model, could also provide tangible benefits.

Many companies perceive that an aggressive 5G rollout can strengthen their brand, and in a crowded marketplace, this becomes more important than ever. What they forget is that the core is the provision of connectivity services, not network deployment and management. In Mexico, for example, network sharing between AT&T and Telefónica allowed the two competitors to focus on high-value-added (and higher-margin) activities. The key is understanding that being a top connectivity provider does not necessitate building and maintaining proprietary networks. You can make the best omelet without having to lay the eggs.

NEW TELECOMMUNICATION REVENUE STREAMS BUT WITH LIMITED UPSIDE

Some telecom operators are planning differential pricing for 5G speed and reliability. Consumers who want to be in the fast lane will have to pay an extra monthly charge. Verizon is currently charging an additional $10 a month for 5G plans in the admittedly still-limited markets it has rolled out, and AT&T has announced its intention to introduce a tiered-pricing plan as well. These markups will soon become part of the standard package as prices converge and, ultimately, decline.

The ongoing convergence between wireless and broadband will also likely intensify, with potential revenue opportunities for telecom operators. As speeds and data capacity increase with 5G, the differences between fiber, satellite, and wireless begin to disappear. In the United States, both Verizon and AT&T are already in the broadband business, but 5G may open the door for broader competition.

In the business-to-business space, corporations may be willing to pay premium pricing for superior performance. In addition, many telcos cite new applications for wireless technologies—particularly with regard to the exponential growth in the Internet of Things—as having to drive further demand and new potential revenue streams. However, the potential upside the new applications can have on telco earnings is likely modest and unlikely to provide positive returns on investment for a nationwide rollout.

Indeed, our belief is that even the cumulative effect of all of the potential new revenue opportunities will be insufficient to fundamentally reshape most telecommunications operators' profitability. And given the substantial competition across most markets, together with a similar history with 4G, their ability to hold the line on pricing is likely limited. In the United States, T-Mobile, which admittedly lags in its implementation of 5G, has announced it will not introduce a tiered pricing structure. In Europe, which faces stiffer competition, the outlook is even less optimistic, with competitive operators already removing the premium.

Telecommunications operators, which play a critical role in providing connectivity services for the digital economy, are at a crossroads. Costs are going up as paths to higher revenues—either through traditional business lines or by means of diversification into content—are decidedly unclear. The 5G rollout is essential, but the financial benefits of a faster rollout may be limited. If competitors (and regulators) are not aligned on this point, it may trigger another race to the bottom, which may jeopardize sustainable rollouts across various nations.

Radically simplifying operating models and investing smartly in new digital technologies to transform their core businesses and get closer to customers are essential next steps for companies across the industry. On this basis, profitability of their core business can be increased, and incremental new businesses and revenue streams can be built.

By getting themselves financially and operationally healthy, operators may once again become the agile powerhouses they once were.

Notes

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5. "Cisco Visual Networking Index: Forecast and Trends, 2017–2022 White Paper," Cisco Systems, Inc., February 27, 2019.

6. "Intelligent Connectivity: How the Combination of 5G, AI and IoT Is Set to Change the Americas," GSMA Intelligence, September 12, 2018.

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9. Klint Finley, "How Amazon, Google, and Facebook Will Bring Down Telcos." WIRED, December 30, 2016; https://www.wired.com/2016/12/the-end-of-telcos/.

10. AT&T financial results.

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About us

For nearly forty years, AlixPartners has helped businesses around the world respond quickly and decisively to their most critical challenges–circumstances as diverse as urgent performance improvement, accelerated transformation, complex restructuring, and risk mitigation.

These are the moments when everything is on the line: a sudden shift in the market, an unexpected performance decline, a time-sensitive deal, a fork-in-the-road decision. But it's not what we do that makes a difference; it's how we do it.

Tackling situations when time is of the essence is part of our DNA, so we take an action-oriented approach at all times. We work in small, highly qualified teams with specific industry and functional expertise, and we operate at pace, moving quickly from analysis to implementation. We stand shoulder to shoulder with our clients until the job is done and only measure our success in terms of the results we deliver.

Our approach enables us to help our clients confront and overcome truly future-defining challenges. We partner with you to make the right decisions and take the right actions. And we are right by your side. When it really matters.

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