How do you balance risk with opportunity?

Mitigating the top ten risks in telecommunications 2020
The impact of the COVID-19 pandemic has been two-sided for telecoms operators. On the upside, they’ve gained positive mindshare with customers during the crisis by providing critical connectivity to households and businesses. Their networks have generally withstood the sharp increase in demand driven by home working, schooling and entertainment.

Equally positively, operators have proactively provided customer relief packages, and worked closely with governments, where needed, to support vulnerable customers and health care providers.

The telecoms industry has been recognized and appreciated for these efforts. EY consumer research shows that customer perception of its performance during the pandemic is more positive than service providers in adjacent sectors, such as social media platforms. And, while COVID-19 has led to revenue shortfalls in most sectors, telcos have been less exposed to falling demand. Customers have only become more dependent on connectivity during national lockdowns, while telcos’ subscription-based business models have offered further levels of insulation.

The top 10 risks in telecommunications 2020

1. Failure to ensure infrastructure resilience and reach
2. Inability to scale internal digitization initiatives
3. Failure to redesign workforce purpose and inclusion
4. Failure to improve capex efficiency and network returns
5. Underestimating changing imperatives in privacy, security and trust
6. Poor management of investor and stakeholder expectations
7. Ineffective engagement with industry verticals and public sector
8. Inability to adapt to a changing regulatory landscape
9. Failure to mitigate evolving disruptive scenarios
10. Failure to take advantage of changing market structures

How EY can help
However, COVID-19 has not been all positive for telcos. Their revenues are set to decline across most product categories, especially in mobile and enterprise segments, which are most exposed to the negative impact of travel restrictions and business closures. Depending on the severity and longevity of the crisis, industry revenues could take up to four years to recover to pre-COVID-19 levels.

The pace of recovery is unknown. However, various forces are informing emerging strategies that can help the industry to “build back better.”

Sustainability is rising up the corporate agenda: telcos recognize its role in their transformation strategies and can contribute to the sustainability drive in other industries. Employee propositions are also in focus as organizations look to safeguard workforce well-being, attract the best talent, and improve levels of diversity and inclusion. Previous assumptions around digital transformation timescales are also changing fast – an acceleration of existing plans is important to many.

With these factors in mind, the concept of recovery is about much more than just a return to the world that existed before the pandemic. The “new normal” in telecommunications will require new thinking, new competencies and new actions.

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1 “COVID-19: Telecoms operators will not be immune to the impact of the outbreak – recovery could take up to 4 years,” Analysys Mason.

Source: “COVID-19: Telecoms operators will not be immune to the impact of the outbreak – recovery could take up to 4 years,” Analysys Mason.
The challenges of recovery are compounded by escalating trade and geopolitical risks. COVID-19 is dampening foreign direct investment (FDI) and global trade which, as a result,² is expected to shrink by between 13% and 22% from 2019 to 2020. Meanwhile, populism and nationalism continue to gain ground, with a new cohort of interventionist leaders blurring the dividing line between politics and business.

What’s more, the rising tide of protectionism is putting digital infrastructure at the center of a new technology “cold war” fueled by intensifying competition around emerging technologies such as 5G and artificial intelligence (AI). Consequently, telecoms networks and capabilities are increasingly regarded as national strategic assets that need to be protected from international competition or disruption.

These dynamics are manifesting themselves in multiple ways, including bans on some network equipment vendors driven by cyber espionage fears, the growing prospect of government ownership of infrastructure, and disinformation campaigns around 5G.

These geopolitical risks, in tandem with national responses to the COVID-19 pandemic, mean that country-level operating environments are diverging. While demand scenarios informed by the crisis are often consistent across geographies, supply-side factors involving technology and regulation are increasingly country-specific. In this light, agile risk frameworks are becoming ever more essential.

² Are you reframing your future or is the future reframing you?, EYGM Limited, 2020.
It’s against this background that we’ve conducted our analysis of the telecoms risk universe in 2020. As in previous years, we’ve combined insights from our industry and consumer surveys with the evolving perspectives of our sector practitioners to pinpoint the most critical risks facing telcos today. As the “risk radar” shows, we organize the sector’s risk factors into four categories – compliance, operational, strategic and financial – and rank each risk on its importance and impact.
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2. Inability to scale internal digitization initiatives
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At a high level, our risk analysis suggests that telcos will struggle in the post-COVID-19 environment, unless they focus on building network resilience and reach while driving positive customer perceptions. Here are the 10 biggest risks we’ve identified across the sector.

1. **Failure to ensure infrastructure resilience and reach**

Telcos have experienced significantly higher network demand globally during the crisis – with the initial lockdowns triggering reported traffic spikes of between 10% and 70%, as families switched to home working, schooling and entertainment. While most of the surge in traffic was on fixed networks, mobile voice usage also increased.

Telcos’ networks have generally held up well, but challenges persist. Sustaining positive customer perceptions is key, while network quality is still a pain point for some users. For example, one in four UK consumers has voiced concerns about a reduction in broadband performance during the crisis. Looking ahead, telcos will also need to work with other service providers, such as over-the-top (OTT) streaming providers, to ensure customer experiences remain positive.

Meanwhile, digital inclusion has also gained prominence during the crisis. Efforts to bridge the digital divide are likely to gain additional stakeholder attention going forward. This is especially true as concepts of vulnerable customers evolve and governments look toward digital infrastructure in order to overcome the coverage limitations of legacy systems in health care and public services.

2. **Inability to scale internal digitization initiatives**

COVID-19 has triggered an industry-wide reappraisal of digital transformation initiatives, with the constraints facing front-line staff – especially retail store workers, customer support agents and technicians – demanding a greater focus on digital customer engagement and support.

EY research shows that, in the wake of the pandemic, more than three-quarters of industry executives are either re-evaluating or adapting the speed of automation and digital transformation programs as a whole. Accelerating existing transformation programs is becoming critical as telcos move from being “digital-first” to “digital-throughout” organizations.

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3 EY survey of 2,500 UK households, 27 May – 1 June 2020.
But while ambition levels are higher than ever, historical barriers still need to be addressed. These include a lack of long-range planning that hampers automation, inadequate skills in analytics and AI, and misalignments between technology and business strategies. New considerations are also making their presence felt: a key example is ensuring that digitization programs are informed by and contribute to sustainability imperatives.

COVID-19 forces telcos to rethink their transformation plans

Q. How would a COVID-19 reference affect your decision in the following areas?

3. Failure to redesign workforce purpose and inclusion

Talent attraction and workforce diversity are top-of-mind issues in the sector, and telcos have the chance to improve their employee proposition in the wake of COVID-19, building on a renewed social purpose to help them attract the next generation of science, technology, engineering and mathematics (STEM) graduates.

However, talent acquisition priorities do not align well with these long-term considerations. Industry surveys show that tactical needs, such as increasing hiring manager satisfaction and reducing cost per hire, still tend to outscore strategic improvements, including building a sustainable talent pipeline or improving employer brand representation.

Workforce diversity and inclusion is another increasing concern, with growing pressure for action to improve female representation on boards and enhance ethnic diversity. Progress has been made in recent years, but technology and telecoms organizations still underscore other industries. For example, in the UK, women account for 22% of directorships in technology companies, compared with 29% in non-technology companies. Improving diversity outcomes is vital, but so are reaffirmations of racial equality principles alongside efforts to remove unconscious bias within organizations.

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4 EY Capital Confidence Barometer survey of 2,992 M&A executives worldwide, including 117 telecoms respondents.

5 “Diversity and inclusion in UK tech companies,” Tech Nation.
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Telcos' talent acquisition priorities

- Improve quality of hire: 31%
- Increase hiring manager satisfaction: 28%
- Reduce cost per hire: 28%
- Increase referrals: 25%
- Improve quality of talent acquisition data: 19%
- Improve employer brand representation: 19%
- Build sustainable pipeline: 16%
- Reduce agency utilization: 13%
- Reduce time to hire: 13%
- Improve diversity representation: 9%

Source: “Talent acquisition practices: telecommunications industry spotlight,” APQC, 2018

4. Failure to improve capex efficiency and network returns

Telecoms network upgrades are under more scrutiny than ever, as COVID-19 intensifies the focus on network performance, reach and accessibility, and infrastructure modernization programs continue. Capabilities such as 5G, full fiber and the internet of things (IoT) can bolster cross-industry service innovation and crisis resilience. And while COVID-19 may dampen spending levels over time, some operators are responding to stakeholder pressure by accelerating their capital expenditure (capex) programs.

Yet return on capital employed (ROCE) continues to trend downward for many communications providers, meaning higher capex efficiency is essential. This is something that emerging technologies such as AI, automation and software-defined networks (SDNs) – along with more nuanced “build, buy or partner” strategies – can help deliver. Achieving the right balance between these different capex efficiency levers will become even more important as new technologies such as 5G reshape traditional network rollout models.

European operator ROCE development, 2015-19

Source: “European Telecoms: Vision 2020,” Macquarie Research, 19 October 2019

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5. Underestimating changing imperatives in privacy, security and trust

Customers’ concerns over privacy and security are rising, with less than half feeling they are in control of their online personal data. COVID-19 has heightened these fears, with reports of video calls being hacked and contact tracing apps raising digital privacy issues. Nevertheless, nearly 3 in 10 consumers are willing to exchange their data for tailored services, underlining the monetization opportunities for well-managed customer insights.

However, EY research shows the industry still regards cybersecurity primarily as a reactive, compliance-centric process rather than a proactive, trust-driven domain. While telcos typically outscore other TMT sectors as perceived “data guardians,” they have yet to translate higher trust into meaningful net promoter score gains or higher rates of adjacent service revenue growth. Telcos could augment their home connectivity packages with smart security products, for example.

6. Poor management of investor and stakeholder expectations

COVID-19 has disrupted forward-looking guidance from operators worldwide, with several withdrawing their full-year guidance for 2020, even while noting a resilient performance during the first quarter. There are many reasons for this caution. Roaming and enterprise revenues remain under pressure due to lockdowns, and medium-term capex is a major unknown: many industry forecasts are already signaling flat mobile capex from 2021.

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8 More engagement, more anxiety, EYGM Limited, 2020 (based on a survey of 2,500 UK households)

9 Decoding the digital household, EYGM Limited, 2020 (based on a survey of 2,500 UK households).

Dividend sustainability is also under scrutiny, with only three-quarters of the world’s top 50 operators (by revenue) having paid or reaffirmed their dividend this year. And network infrastructure is an increasingly politicized issue, with government and industry positions on supply chain regulation often unaligned, creating further uncertainty for investors. Forming a credible sequence of investor communications during this unprecedented period will demand both foresight and flexibility.

7. **Ineffective engagement with industry verticals and public sector**

COVID-19 has accelerated digitization across many sectors, suggesting new opportunities for telcos to deliver sector-specific enterprise solutions. While different industries are at varying stages of their 5G and IoT investment programs, they all need support to realize the “next wave” opportunities on offer. The pain points for enterprises trying to seize these opportunities include low awareness, both of the benefits 5G offers and of how it fits with other emerging technologies such as edge computing and AI. According to EY research, 80% of enterprises across verticals want 5G providers to articulate a more coherent 5G vision, underlining the need for clearer dialogue.¹²

Meanwhile, telcos’ relationships with governments are deepening, with operators playing a pivotal role in pandemic response and recovery. Governments are taking an unprecedented interest in vulnerable customers and industrial transformation via 5G, fiber and IoT. Partly as a result, telecoms’ status as a national strategic asset is stronger than ever. Making the most of this more intimate relationship driven by COVID-19 will require ongoing focus in specific areas. Revisions to spectrum auction frameworks and easier site access for network deployments could help create a better environment for investment.

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¹¹ EY analysis.

¹² Maximizing the 5G opportunity for enterprise, EYGM Limited, 2020 (survey of 1,000 enterprises worldwide).
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Current IoT and 5G investment levels by vertical industry

Q. Which of the following emerging technologies is your organization investing in or planning to invest in over the next 12 months?

<table>
<thead>
<tr>
<th>Technology</th>
<th>Currently investing in IoT</th>
<th>Currently investing in 5G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive and transportation</td>
<td>37%</td>
<td>12%</td>
</tr>
<tr>
<td>Consumer products and retail</td>
<td>46%</td>
<td>16%</td>
</tr>
<tr>
<td>Energy, mining and utilities</td>
<td>43%</td>
<td>9%</td>
</tr>
<tr>
<td>Financial services</td>
<td>42%</td>
<td>10%</td>
</tr>
<tr>
<td>Government and public sector</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td>Health care and life sciences</td>
<td>36%</td>
<td>13%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>36%</td>
<td>22%</td>
</tr>
<tr>
<td>Technology</td>
<td>32%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Percentage of respondents

Source: Maximizing the 5G opportunity for enterprise, EYGM Limited, 2020. (Survey of 1,000 enterprises worldwide)

8. Inability to adapt to a changing regulatory landscape

The heightened importance of digital infrastructure during the COVID-19 crisis has prompted regulators to focus more on issues such as consumer protection, data privacy and the digital divide. Going forward, other issues such as net neutrality may rise up their agendas. New areas of stakeholder scrutiny are also emerging, such as regulation of network equipment supply chains.

Meanwhile, COVID-19 has seen several countries either defer spectrum auctions or grant temporary spectrum access to operators in 2020. These moves could impact long-term spectrum release frameworks, with knock-on effects on operators’ capex planning. Ultimately, levels of regulatory predictability have declined following the pandemic. It is vital for communications providers to ensure that regulatory burdens remain manageable and reflect telcos’ renewed importance to society. This includes assessing the likely impact of both short-term COVID-19 measures and evolving policy frameworks. Understanding the interplay between them is also essential.

Regulatory domains impacting operators

Source: EY analysis.

13 Maximizing the 5G opportunity for enterprise, EYGM Limited, 2020 (survey of 1,000 enterprises worldwide).

14 EY analysis.
9. Failure to mitigate evolving disruptive scenarios

Geopolitical and global trade forces are disrupting network equipment supply chains, as a number of countries mandate bans or limits on hardware from Chinese vendors. The costs and effort of removing existing equipment could potentially delay 5G rollouts. An accompanying trend is diversification of network equipment supplier bases. Open radio access network (RAN) solutions are gaining traction as operators seek more choice and new entrants emerge in different parts of the equipment supply chain.

Technology players are also moving to exert more control over their value chains, with network equipment vendors targeting private long-term evolution (LTE) and 5G networks for enterprises. This is a move that threatens operators with disintermediation. Meanwhile, the web giants have begun to acquire minority stakes in mobile operators and are now significant investors in subsea cable infrastructure. New entrants in the mobile industry also continue to drive down pricing to gain market share. Ultimately, legacy value chains are subject to forces of both convergence and disaggregation, forcing communication providers to adapt their approach to disruption.

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10. Failure to take advantage of changing market structures

Developments in wholesale markets are opening up fresh opportunities. Mobile virtual network operators (MVNOs) have historically targeted price-sensitive consumers. However, capabilities such as network slicing mean that 5G presents a growth opportunity for enterprise-focused MVNOs. New opportunities are also emerging in fixed wholesale, with the growth in fiber altnets and wholesaling of cable infrastructure now mandated in some markets.

The emergence of a more diverse wholesale landscape is partnered by ongoing opportunities to simplify the network estate and de-risk investments. Infrastructure switch-off is growing in importance, with telcos’ plans and timescales influenced by changing regulation and the impact of decommissioning on shared networks. Meanwhile, tower sale-and-leaseback and infrastructure joint ventures are still very prominent, with more carve-outs or IPOs in prospect. To take advantage of more efficient market structures, operators will need to refine their existing inorganic growth strategies, reassessing M&A and partnership opportunities in the process.

Global mobile tower ownership by category\(^{16}\)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator-led towerco</td>
<td>55.6%</td>
</tr>
<tr>
<td>Mobile network operator-captive sites</td>
<td>30.2%</td>
</tr>
<tr>
<td>Pure-play independent towerco</td>
<td>13.1%</td>
</tr>
<tr>
<td>Joint venture towerco</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

*100% = 4.9 million towers*


\(^{16}\)“A brief history of the global tower market,” TowerXchange Issue 24, November 2018.
The telecoms sector is at the heart of the digital disruption and convergence agenda. Given this positioning, are you embracing the right opportunities – and mitigating the right risks?

EY is one of the world’s leading and most trusted professional services firms and serves the majority of leading telcos worldwide. We can help you find the right answers and prioritize your transformation needs across a range of dimensions.

Whether your focus is on scaling and accelerating returns from digitization initiatives, achieving the right level of infrastructure resilience and reach in the most efficient way, or ensuring that your customers and stakeholders trust you as much as possible, we offer a range of solutions that can deliver positive outcomes:

**Digitization**
- Digitally Integrated Customer Experience
- Intelligent Automation
- IoT Platforms

**Network and IT effectiveness**
- Agile Business Transformation
- Capex Navigator
- Network engineering, deployment and operations
- Business Support System (BSS), Operational Support System (OSS) and IT Transformation
- Convergence Post Merger Integration

**Enterprise trust**
- Cybersecurity
- Legal Managed Services
- Tax Finance Operate
- Climate Change and Sustainability

In all these areas and more, EY teams can help you develop the right long-term strategy. As major events – from the COVID-19 pandemic to geopolitical tensions – continue to unfold at pace, the ability to adapt and respond with energy and purpose has never been more important. And while the risks landscape is more challenging than ever, taking advantage of the right opportunities can help you thrive in the now, next and beyond.
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