

# CROSSING THE CHASM: MOBILE CARRIERS ACCELERATE DIGITAL SERVICES PLAY

THE CONSUMER 5G IMPACT



by **docomo** digital



The digital ecosystem is growing at a frenzied pace, with 5G now offering higher bandwidth, low-latency and speeds that will be way faster than the outgoing 4G networks.<sup>1</sup> 5G is capable of supporting 1,000 more devices for every metre of coverage as compared with 4G networks, and that's a big deal.<sup>2</sup> In result, transferring and downloading high-resolution video content will only take mere seconds as opposed to several minutes.

A study conducted by the Emodo Institute in March 2021 found that 80% of 5G phone owners reported noticing a compelling speed difference on 5G network.<sup>3</sup> This will have implications not only on the consumer experience, but potentially on telco revenue and profitability too.

This is because telcos are uniquely positioned to provide a one-stop platform providing connectivity as well as content creation, marketing and distribution services. 5G will bring out new opportunities for telcos, allowing them to monetise and add value proposition to connectivity.

In the US, 5G service subscriptions witnessed a sharp spike of 1,080.9% in 2020, growing from 1.3 million subscribers in 2019 to 15.8 million subscribers in 2020. And the number is expected to grow to 167.9 million by 2024 in the US alone.<sup>4</sup>

5G networks can support latency levels as low as 1 millisecond – implying almost instantaneous data feeds. This will allow for the wider adoption of IoT, cloud and edge computing, and the usage of VR and AR platforms,

among others. This tech breakthrough is promising to turn into reality numerous innovations that, only two decades ago, would have been regarded as science fiction.<sup>5</sup>

Mariano Martinez, Director of Partnerships at Telefónica Group, says 5G technology “will bring us a lot more devices—not just smartphones—and that’ll probably create new business opportunities and new connectivities.”

Other examples of IoT use cases requiring ultra-low latency include manufacturing, healthcare, gaming, retail, agriculture, office productivity and education, among others. Its benefits are also acknowledged in high frequency trading platforms that are dependent on immediate global data feeds. Considering telcos are at the 5G era’s centre, they will leverage on their customer bases and build on their tech expertise.

According to Ericsson, telcos that make a dedicated push towards innovation, 5G can help push revenue by as much as 30% by 2030,<sup>6</sup> and 5G consumer user cases can generate additional direct revenue of \$131 billion. The key opportunities will result from high-speed data consumption, enhanced video, live sports and event streaming, music streaming, gaming, augmented and virtual reality, various kinds of IoT services and applications, automated mobility and connectivity, and digital advertising.<sup>7</sup>

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**Mariano Martinez**  
Director of Partnerships  
Telefónica Group  
*Telefónica*

<sup>1</sup> Intel. Understanding the Advantages of 5G. Available online at: <https://www.intel.com/content/www/us/en/wireless-network/5g-benefits-features.html>

<sup>2</sup> DHL. 5G and what it means for logistics. Available online at: <https://www.dhl.com/discover/business/productivity/5g-and-logistics>

<sup>3</sup> Emodo Institute. 5G and the Emergence of Immersive Advertising: Augmented Reality and Other Experiences. Available online at: <https://vimeo.com/560469438>

<sup>4</sup> Ibid

<sup>5</sup> Intel. Understanding the Advantages of 5G. Available online at: <https://www.intel.com/content/www/us/en/wireless-network/5g-benefits-features.html>

<sup>6</sup> Ericsson. Two-fifth of direct revenues from digital services will be driven by enhanced video and immersive media. Available online at: <https://www.ericsson.com/499cf3/assets/local/5g/5g-for-consumers/5G-opportunities-infographics.pdf>

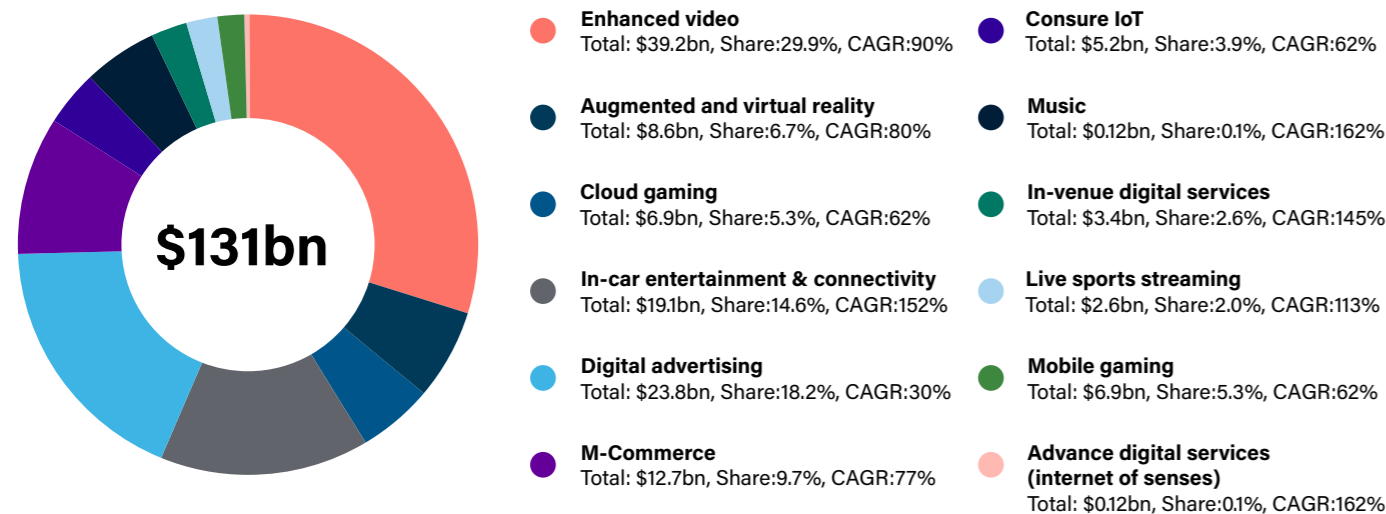
<sup>7</sup> Ibid



## Exhibit 1: What are the biggest 5G consumer opportunities?

### Two-fifth of direct revenues from digital services will be driven by enhanced video and immersive media

Global, service provider share of 5G-enabled digital consumer services cumulative revenues by type, 2019-2030



Source: *Harnessing the Consumer Potential Study, November 2020, Ericsson and Omdia analysis*

“ Giving our customers the possibility to have access to the best hardware, the best connectivity, the best content and portfolio products, the best gaming experience is a very, very strong proposition.”



**Francesco Zampini**  
Director of Devices and Digital Products & Services  
CK Hutchison Group



With 5G, telcos will need to expand their product portfolio and customer value proposition in order to drive revenues. Several telcos are already pivoting in this direction.

From a B2B standpoint, where the greater revenue opportunities lie from a telco standpoint – the manufacturing sector will undergo a metamorphosis as 5G, AI and IoT converge. These technologies will allow predictive maintenance, while keeping costs and downtime to a minimum. With 5G networks' faster speeds, manufacturers can also achieve higher levels of precision, allowing quality benchmarks to be set higher.

Network slicing is another 5G-enabled innovation that promises significant cost savings for telcos compared to traditional physical networks. In simple terms, network slicing offers use-specific virtual networks, each with varying degrees of independence. These virtual networks piggyback on shared physical infrastructure and could be critical for telcos. The flexible aspect of network slicing will enable telcos to offer an array of services, with customised levels of service.<sup>8</sup>

Singtel, one of the largest telco companies in Singapore, has recently unveiled its XO Plus plans which provides users with a 5G handset, 150GB data allowance, and a three-month complimentary subscription to its

augmented reality (AR) educational content on Bookful and virtual reality (VR) live music content with MelodyVR. The Bookful app brings to life stories using AR and 3D animations to enrich the learning experience. Meanwhile, “MelodyVR provides unlimited access to the world’s largest library of 360-degree VR concerts from global hitmakers like Imagine Dragons, Kelly Clarkson, Lewis Capaldi and more.”<sup>9</sup>

While telcos can typically charge customers a premium for new generation technology, the ongoing pandemic has complicated matters and there were several instances of 5G services being rolled out without being priced at a premium in the first three quarters of 2020. But this has encouraged 5G bundling – or in other words, adding digital media services to 5G packages. According to Omdia, in the first six quarters of the 5G rollout (between Q2 2019 and Q3 2020), almost two-thirds of tariffs were bundled with either third-party over-the-top (OTT) services or telco’s own digital services. In fact, 44% of 5G tariffs were bundled with OTT services and an additional 19.5% with both OTT and telco VAS services.<sup>10</sup>

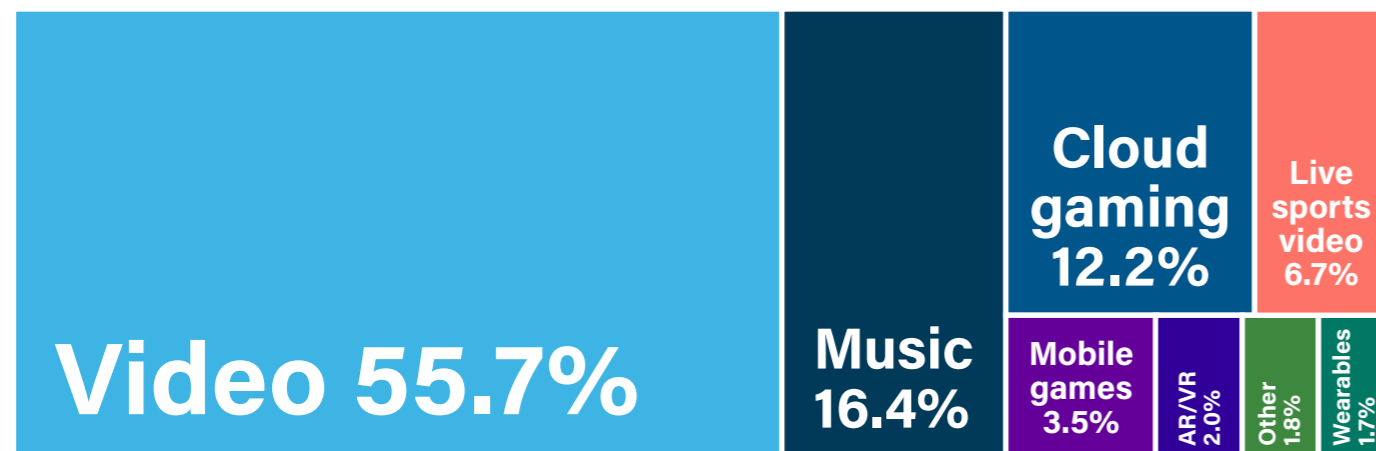
Looking ahead, in addition to video and music, cloud gaming and live sports will be the most significant services that bundling will help unlock value in.

<sup>8</sup> Comarch. *How Telcos are Discovering New Revenue Streams with Network Slicing for 5G*. Available online at: <https://www.comarch.com/telecommunications/blog/how-telcos-are-discovering-new-revenue-streams-with-network-slicing-for-5g/>

<sup>9</sup> Singtel. *Singtel unveils next-generation XO Plus plans with 5G access, AR and VR content*. Available online at: <https://www.singtel.com/about-us/media-centre/news-releases/singtel-unveils-next-generation-xo-plus-plans-with-5g-access-ar-and-vr-content>

<sup>10</sup> Omdia. *Global Carrier-Billing Forecast Report –2020–25*. Available online at: <https://omdia.tech.informa.com/OM016882/Global-Carrier-Billing-Forecast-Report--202025>

## Exhibit 2: 5G bundling-derived OTT digital services revenue by 2025, by category



Source: Omdia's Global Carrier-Billing Forecast: 2020-25 and Harnessing the 5G consumer potential (Ericsson whitepaper)

Similar advances are being seen elsewhere too. In healthcare, personalised medical care will be transformed with 5G adoption as medical professionals will be able to better administer care to patients with the use of low latency networks. Wearable devices will also be able to do more, while AI instruments will allow more precise diagnoses to be made, possibly even remotely.<sup>11</sup>

5G's impact is going to cut across almost all industries and plenty of individual consumer use cases. Telcos are well-positioned to capitalise on the revenue growth opportunities 5G uptake will provide.

But the cost of obtaining 5G licenses and rolling it out will certainly put a burden on telcos. And telcos will have a hard task to ensure their subscribers are ready to pay the premium fees that come with 5G. The average 5G monthly tariff is expected to be about \$89 as compared to \$68 for 4G plans. But telcos have been innovative in ensuring they keep their subscriber base intact while rolling out bundled plans that include 5G connectivity. For example, Korea Telecom has provided a 50% discount on its premium family plans, along with

unlimited roaming data of speeds up to 3mb/s and VVIP membership for its 5G unlimited plan subscribers, justify the \$51 price increase from the 4G unlimited plan.<sup>12</sup>

Over time, these tariffs are expected to come down as was seen with earlier generations. But till then, telcos will need to leverage on the bundling approach, low latency and faster throughput rates in attracting and retaining customers to pay a premium for 5G.

5G is still in its infancy and the full extent of its use cases is still not completely imagined. It is, however, clear that if leveraged well, 5G could drive the next phase of growth for telcos globally. What works in the telcos' favour is that they do not need to reinvent the wheel – they have been in this sort of position earlier too, when 3G and then 4G services were rolled out. But the telcos must be smart about how 5G services are packaged and offered in a manner that customers are offered cutting-edge and tailored services for which they are willing to pay a premium.



<sup>11</sup> McKinsey Global Institute. Connected world: An evolution in connectivity beyond the 5G revolution. Available online at:

[https://www.mckinsey.com/~/media/mckinsey/industries/technology%20media%20and%20telecommunications/telecommunications/our%20insights/connected%20world%20an%20evolution%20in%20connectivity%20beyond%20the%205g%20revolution/mgi\\_connected-world\\_discussion-paper\\_february-2020.pdf](https://www.mckinsey.com/~/media/mckinsey/industries/technology%20media%20and%20telecommunications/telecommunications/our%20insights/connected%20world%20an%20evolution%20in%20connectivity%20beyond%20the%205g%20revolution/mgi_connected-world_discussion-paper_february-2020.pdf)

<sup>12</sup> Mobile World Live. Intelligence Brief: How much will we pay for 5G. Available online at:

<https://www.mobileworldlive.com/blog/intelligence-brief-how-much-will-we-pay-for-5g>

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