5G driving revenue growth in top 20 markets

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5G driving revenue growth in top 20 markets

In the top 20 5G markets, there has been a positive revenue growth trend since the beginning of 2020 that correlates well with the increasing 5G subscription penetration in these markets.

The demand for mobile data is strong and is continuing to grow. Over the past 5 years, global data consumption has increased by over 50 percent per year, or by more than 8 times over the entire period. This is an indicator of the importance that mobile services play in people’s lives. The data growth rate in the top 20 5G markets largely follows the average global growth rate. This means that the top 20 5G markets, which already have very high data consumption, are able to continue with the same growth rate as markets with lower consumption.

5G is also adding network capacity and thereby creating the foundation for further data consumption growth. This capacity also forms the basis for monetization of growing consumer demand through larger data packages. While data volume has been the traditional basis for charging for mobile services, the shift to 5G also opens up new ways to measure, drive and capture consumer value.

Network performance is key for future monetization

Figure 2 depicts the network performance development, in terms of downlink throughput, for the top 20 5G markets as well as the global average. In the top 20 5G markets, the average downlink throughput has increased by 4.3 times over the past 5 years. This is 32 percent more than other markets on a global level, showing the positive impact 5G has had on network performance and user experience. The most significant network performance improvement in the top 20 5G markets

The "top 20 5G markets" referred to in this article have been selected on the basis of 5G subscription penetration, in order to identify highly developed 5G markets. These markets represent 85 percent of all 5G subscriptions globally.

All of the top 20 5G markets have 5G penetration of more than 15 percent, with average penetration of above 20 percent. The most mature market even reaches a 5G subscription penetration close to 40 percent — an impressive figure when compared to the global average of around 10 percent.

Analysis of the 5G impact on consumer data consumption and user experience has also been done for these markets.

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3 Markets categorized as "Top 20 5G markets": Australia, Bahrain, China, Denmark, Finland, Hong Kong, Ireland, Japan, Kuwait, Monaco, Norway, Qatar, Saudi Arabia, Singapore, South Korea, Switzerland, Taiwan, the UAE, the UK and the US. Data analysis covers 52 service providers across these 20 markets.
happened in 2020, following the introduction of 5G services. As the top 20 5G markets started to benefit from the capabilities of 5G, the 2 curves started to diverge.

**5G is providing a network performance boost**

The network performance contribution from 5G can be seen in Figure 3. It shows how, in the top 20 5G markets, the median downlink throughput of 5G is 5.8 times higher than the throughput of 4G (187 Mbps vs. 32 Mbps) in Q3 2022. This performance boost is what service providers could offer to consumers as an immediate benefit of upgrading to 5G.

The fact that the top 20 5G markets have twice the 5G penetration compared to the global market average, as well as almost 6 times better performance of 5G in these networks, explains their lead when it comes to overall network performance.

The impressive network performance levels of 5G when the new generation was first introduced in 2019 have gradually decreased over time, as the traffic and the utilization rate of the 5G networks have increased. As usage of 5G has matured in these leading markets, performance levels have now stabilized at around 200 Mbps for median downlink throughput.

**Monetizing the network performance boost in steps**

An increasing number of service providers are exploring speed tiering as a way to monetize the significant performance boost offered by 5G. This allows 5G performance to be offered as a “ladder”, enabling an incremental upgrade path for consumers, while also creating a gradual monetization model for service providers.

Incremental pricing models are key for service providers, both for effectively addressing the individual needs of each customer and for continuing to drive long-term revenue growth.

**Wireless service revenue development in leading 5G markets**

An examination of how service providers convert their business propositions into business results reveals that revenue curves are again pointing upwards, after a period of slow or no growth. While network investments have been substantial in the initial phase of 5G, with yearly capex levels of the top 20 5G markets increasing by around 30 percent between 2017 and 2022, there are now signs of positive returns on those investments.4

As can be seen in Figure 4, there has been a positive growth trend in the top 20 5G markets since around Q1 2020, which correlates closely in time with increased levels of 5G subscription penetration. Average revenue growth over the past 2 years has been 6.5 percent, or 3.2 percent annually. This follows a period of flat or even declining revenue development. This points firstly to the positive impact 5G has had upon the markets, and secondly to the way in which service providers in leading markets have been successful in converting the potential of 5G into consumer value and revenue growth.

**Service providers in leading markets have been successful in realizing the potential of 5G.**

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4 Ericsson analysis of Strategy Analytics data, Q3 2022.
5G is driving a positive trend-shift
Looking at the average revenue per user (ARPU) trend, as depicted in Figure 5, there are positive signs of stabilization and even growth after a period of decline. This trend shift, starting in the beginning of 2020, is likely the result of consumers gradually migrating to high-value 5G plans. The fact that around 80 percent of consumers in the top 20 5G markets still have not shifted to 5G subscriptions highlights the strong potential for continued growth of both ARPU and revenue.

It is as yet early days for 5G, but analysis of the top 20 5G markets reveals clear indications that leading markets are able to turn customer demand for 5G services into revenue growth. To continue successfully addressing the 5G opportunities, there are some key learnings from the leading markets to consider:

- monetize 5G through the increased consumer value provided by new technology: larger data buckets, higher speeds and better user experience
- offer flexibility, breadth of choice and tiered value propositions, allowing for personalization and incremental growth
- with the above mechanisms in place, fuel the demand for 5G connectivity through innovative and advanced digital services: packaging of differentiated 5G services and 5G-rich content

The complexity of analyzing ARPU
ARPU is a popular indicator of how a market develops. However, an increasing ARPU does not always have to be good for business, while a declining ARPU does not always have to be bad.

Here are some factors that would have a diluting (seemingly negative) impact on ARPU, but which can in fact contribute to higher revenues and better business for the service provider:

- increased uptake of so-called “long-tail” customers, or first-time users, who typically spend less on mobile subscriptions (resulting in a shift of customer mix)
- increased uptake of secondary subscriptions, used either on the customers’ own devices or by someone within the same “account” or family
- increased uptake of IoT subscriptions, typically offered as an add-on to the base subscription, for an incremental fee

Overall revenue trends depend on a combination of both ARPU development and customer base development. If the ARPU decreases, but the number of subscribers increases (for instance, as a result of changing customer mix), then the impact on total revenues could very well be positive. Meanwhile, if ARPU grows but the number of subscribers decreases (for instance, as a result of higher prices), then the impact upon total revenue could very well be negative.

To take into account such factors, some service providers have started to measure average revenue per account (ARPA) as a better metric of how consumer value is captured.

As mobile subscription penetration is now above 100 percent (global average: 106 percent, top 20 markets: 158 percent) and keeps increasing, ARPU cannot be expected to increase.

As explained by the factors above, additional subscriptions and fees will continue to contribute to increasing service revenues, but that growth is not always reflected in the ARPU measurement.

Figure 5: ARPU vs. subscription penetration – top 20 5G markets

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