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5G Pacesetters

Winning in the eyes of consumers and growing revenues

Ericsson Consumer and Market Insight report
November 2021

Contents

Methodology

Ericsson ConsumerLab, in conjunction with leading telecom consulting experts from Tefficient, developed an index that analyzes and measures the 5G market performance and consumer perception of 73 communications service providers across 22 markets. These include Australia, Brazil, Canada, Mainland China, France, Finland, Germany, Italy, Japan, Kingdom of Saudi Arabia, Philippines, Romania, Sweden, South Korea, Singapore, Switzerland, Spain, Thailand, Taiwan, the UAE, the UK and the US. This '5G Maturity Index' tracked each of the service providers' efforts in using 5G to gain a competitive advantage in consumer business and builds on both consumer perception data from Ericsson ConsumerLab consumer surveys and publicly reported 5G market facts. Each 5G service provider was analyzed based on 105 criteria across 16 categories spanning customer satisfaction data to 5G offering, rollout and marketing efforts.

This report builds on consumer perception insights from 2 quantitative studies, conducted by Ericsson ConsumerLab, among smartphone users in 22 markets, including those using 5G networks. The sample consists of 1,000 to 2,000 respondents from each market, with an age range of 15–79 (15–69 in some markets) and is representative of the opinions of 1.1 billion smartphone users including 200 million 5G subscribers. The consumer study was carried out between December 2020 and January 2021, while the remaining half of the index's results, based on publicly reported 5G market facts by service providers, include data collected up until the end of May 2021.

About Ericsson Consumer & IndustryLab

Ericsson Consumer & IndustryLab explore the future of technology for consumers, enterprises, and a sustainable society. We deliver world-class market research, actionable insights, and design concepts to drive innovation and sustainable business development. We provide a scientific fact-based analysis regarding environmental, social, and economic impacts and opportunities of ICT.

Our knowledge is gained from global consumer, enterprise, and sustainability research programs, including collaborations with leading customers, industry partners, universities, and research institutions. Our research programs cover in-depth studies and over 100,000 interviews with consumers, working people and decision-makers each year, in 30 countries – statistically representing the views of 1.1 billion people.

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Measuring 5G progress and maturity

Until now, analysts have predominantly been focused on measuring service providers' progress with 5G in terms of coverage rollout and deployment, or network speeds. However, this approach does not provide the full picture when it comes to 5G leadership. It is also important to analyze how efforts to offer a great 5G network experience can improve consumer satisfaction and perception towards service providers and their 5G offerings, and in turn identify who is setting the pace on 5G performance and innovation.

Ericsson ConsumerLab has previously identified that 5G service providers take either a proactive or passive approach.[1] Taking a proactive approach, for example by exploring new pricing models or even curating new services in-house, offers the best opportunities for service providers to reverse or arrest the decline in consumer revenues. In contrast, a passive approach risks missing out on a growth opportunity of up to 2.7 percent CAGR up to 2030.

This study builds upon these insights by not only identifying proactive service providers but measuring their progress in 5G based on two aspects: consumer perception and service providers' own efforts. We bring into focus the four stages of maturity, identifying the strategies and paths that are taken by the most proactive and successful service providers, '5G Pacesetters', to uncover what sets them apart from the rest of the market, and why they win in the eyes of the consumers. With the transition to 5G, service providers have the power to reverse the trend of stagnating and declining consumer revenue, if they take a proactive approach.

Key findings

The study identifies four stages of 5G maturity among service providers.

- Their maturity level ranges from 5G Explorers just starting their journey, to 5G Potentials, 5G Aspirationals, and finally 5G Pacesetters, who are leading on 5G coverage, performance but have room to improve even further.
- About one out of five service providers included in the study were identified as 5G Pacesetters.

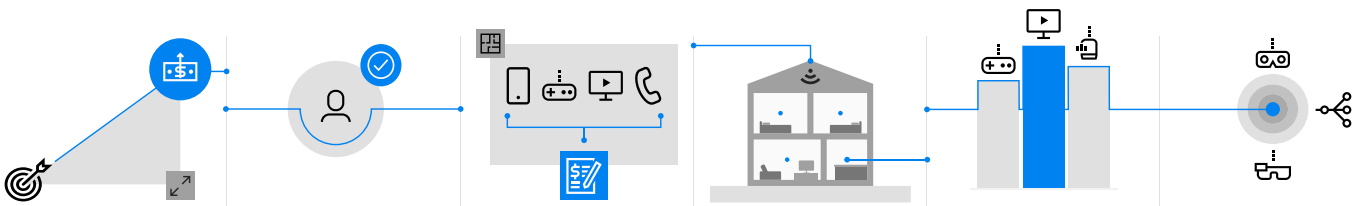
5G Pacesetters lead on consumer perception and satisfaction with 5G.

- They are seen as 5G leaders by 70 percent of their own customers, while only 17 percent prefer others and the rest are unaware.
- They are three times more likely to retain their customers while successfully driving demand for 5G due to better marketing, with 50 percent more customers looking to upgrade compared to other service providers.

5G Pacesetters are rewarded with an uplift in revenues due to their proactive efforts.

- They are nearly twice as likely to grow their ARPU and mobile services revenues by at least 1 percent year-on-year compared to other service providers.
- Three-quarters of them effectively monetize 5G based on tiers of speed, quality of service, Fixed Mobile Convergence (FMC) or bundled content.

5G Pacesetters share a common commitment towards 5G network quality, technology leadership and service innovation. They follow six strategies to succeed in the 5G consumer market:



01 Achieve cost efficiency and scale with 5G

02 Deliver best smartphone experience with excellent 5G coverage and performance

03 Extend fixed mobile and convergence plans with 5G

04 Use 5G to complement and expand fixed broadband footprint

05 Reimagine pricing strategy with premium value tiers

06 Lead with innovative and immersive 5G services

[1] Ericsson ConsumerLab, 'Harnessing the 5G Consumer Potential' (2020)

A consumer and market lens on 5G

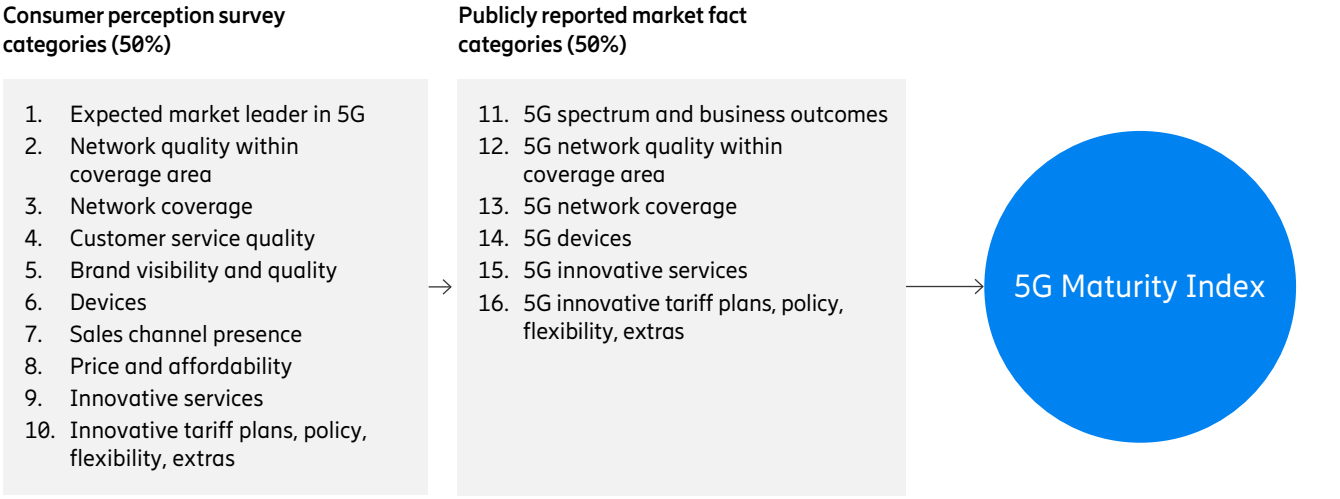
The 5G Maturity Index tracks each service provider's progress in their 5G consumer business by assessing 105 criteria across 16 categories. The consumer perception data forms 50 percent of the index results, while the remaining 50 percent is based on service providers' publicly reported information around 5G progress.

Consumers in 22 markets were asked to provide importance ratings for different criteria, as well as satisfaction ratings for service providers in their local market.

The four stages of 5G maturity have therefore been defined based on each of the 73 service providers' total index scores out of a theoretical maximum of 100. The scores for the top performers, the 5G Pacesetters, range from 49 to 62 points, while the lowest scorers, the 5G Explorers, range from 21 to 29 points.

This shows that even the highest scoring 5G Pacesetters still have plenty of room to improve consumer satisfaction ratings. The results indicate that this can be done by familiarizing consumers with immersive 5G services and by improving their tariff plans and policies, two areas where the gap between consumer perception and actual service provider activity is the widest. In contrast, consumers have rated the 5G Pacesetters most favorably for their network coverage and quality – familiar focus areas from previous generations of technology rollout.

Figure 1: Methodology and structure of the 5G Maturity Index



The four stages of maturity identified are 5G Pacesetters, 5G Aspirationals, 5G Potentials and 5G Explorers.

5G Explorers are often the market price challengers, trailing behind other service providers in all areas of consumer satisfaction and 5G investment. They have only recently started to explore the 5G market, often with limited spectrum holdings or allocations.

5G Potentials are often rewarded for price and affordability by their local markets' consumers. However, so far they have done little to innovate, particularly in accelerating 5G network coverage rollout or introducing new 5G services. Many of the 5G Potentials are in a comfortable market position as they benefit from high consumer satisfaction due to better 4G performance and have therefore been slow to build their 5G business foundations.

5G Pacesetters
- Successful in monetizing 5G. Consumers believe 5G Pacesetters are the 5G market leaders.
- They outpace competition in 5G network coverage, speed and innovative services.

5G Aspirational
- The Aspirationals are often the market challengers, following close behind the Pacesetters in 5G coverage, services and usage.
- The Aspirationals often miss out on high consumer satisfaction and also score lower on recommendation.

5G Potential
- Rewarded for value for money by consumers.
- They benefit from good consumer satisfaction but have been slow to build their 5G foundations.

5G Explorer
- Often price challengers, trailing behind in all areas: consumer satisfaction and 5G investments.
- They have only just started to explore the 5G market.

Figure 2: The four stages of 5G maturity

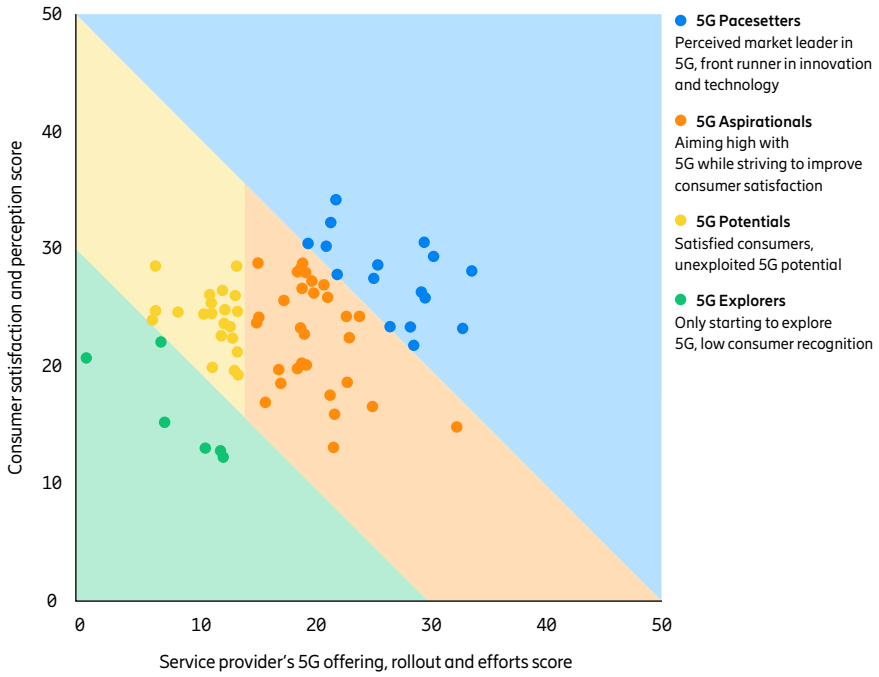
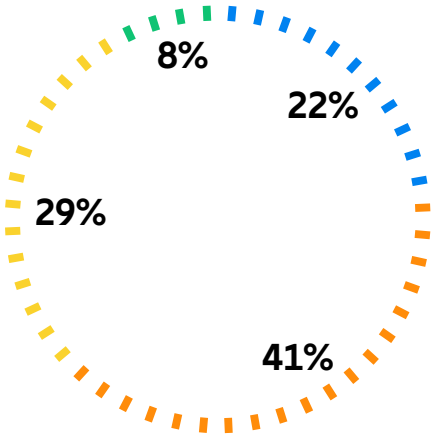


Figure 3: Share of service providers and stages of 5G maturity



5G Aspirationals are usually the market challengers, following closely behind the 5G Pacesetters in 5G coverage, services and offerings. However, they often miss out on high consumer satisfaction and score lower on consumer perception of 5G market leadership and recommendation of their brand.

5G Pacesetters, in contrast, are expected by consumers to become the 5G market leaders. They outpace their market competitors in 5G network coverage and speed, and have invested most into new immersive 5G services and content partnerships to drive differentiation and eventually accelerate the uptake, usage and monetization of 5G.

Interestingly, while some 20 percent of service providers in our study were identified as 5G Pacesetters, they are not necessarily market share leaders or incumbents in their local markets. Most are from Asia and North America, but a third of them are emerging from Europe, indicating that even a late but impactful 5G launch could help service providers secure a 5G Pacesetter positioning. It also appears that the presence of 5G Pacesetters in any given market benefits all service providers. Peers will try to accelerate their 5G efforts to catch up with them, with some successfully evolving their stage of maturity, resulting in a higher number of 5G Pacesetters in that market.

These maturity stages also correlate with the three service provider strategies identified in a previous Ericsson study: quality-led, offering-led and industry-led.[2] Quality-led providers focus on (and invest in) network transformation, sites and spectrum, and are typically the first to deploy the latest technology. Offering-led providers are usually challengers that aim to be first to market with new products and services, therefore maintaining a high level of innovation to capture market share. Industry-led providers are rarely first to market but have found success in being fast followers. They tend to focus on value-for-money propositions in addition to network quality.

Around 63 percent of 5G Pacesetters are quality-led, and have often been first to commercially rollout 5G, 5G standalone, 5G FWA and multi-access edge computing (MEC) in their local markets. They share a common focus on technology leadership and delivering superior 5G network performance. 5G Aspirationals trail closely behind 5G Pacesetters, with 57 percent being quality-led providers, but a third employ an offering-led approach. Only 41 percent of 5G Potentials are quality-led, while 35 percent of them are industry-led. 5G Explorers are most often industry-led and are seen as price challengers or fast followers.

Key characteristics of 5G Pacesetters

- They are perceived as 5G market leaders by close to 70 percent of their own and, 40 percent of all, consumers in their market.
- They achieve an average population coverage of 75 percent,[3] download speeds of 270Mbps, and average 5G availability (percent of time on 5G) of 14 percent or above.
- They launch an average of three 5G services such as cloud gaming, virtual or augmented reality (VR/AR), or enhanced video, and often deliver with local or global partners.
- Their 5G device portfolio is strong and extends beyond smartphones, with 70 percent having introduced wearables enabling immersive viewing experiences.
- 5G standalone and MEC has been commercially deployed by one-third of 5G Pacesetters, compared to none of the Explorers or Potentials.
- 50 percent have commercially launched 5G FWA.
- About 75 percent already monetize with 5G premium tiers based on speed, content or quality of service.
- They're seen as best-in-class brands, with consumers scoring them 32 percent higher on perceived brand visibility and quality versus others in the market.

[2] Ericsson Mobility Report; 'Service providers face three alternative paths to success' (November 2020)

[3] Excluding service providers that have not reported 5G population coverage up until end of May 2021.

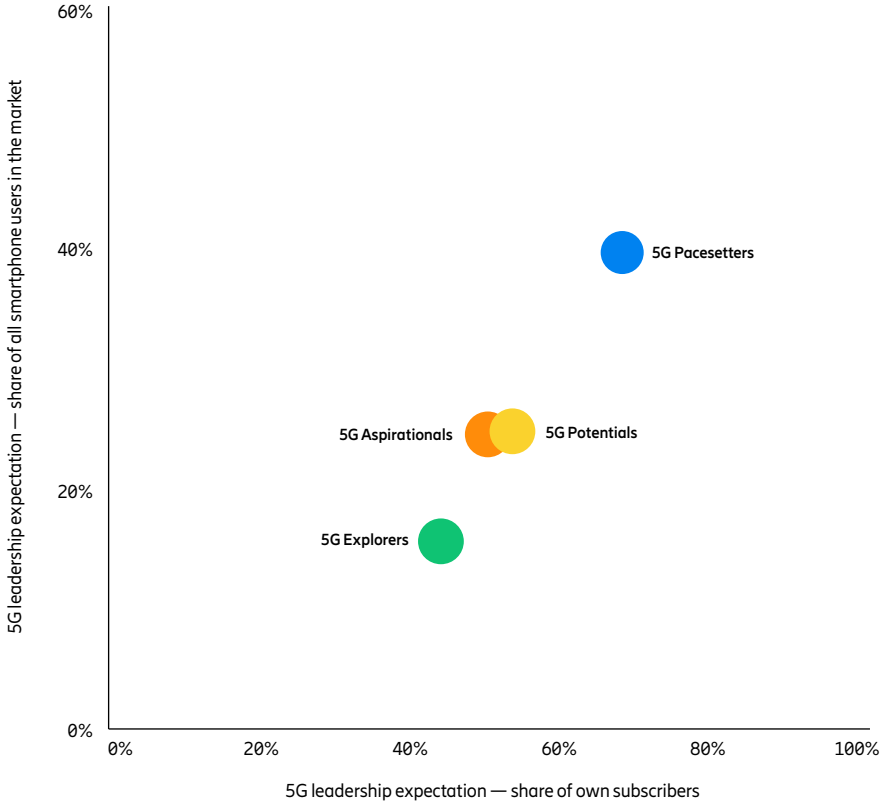
Winning in the eyes of consumers

The customers of 5G Pacesetters rate them higher than other service providers in all aspects (network coverage and quality, brand visibility, sales channel presence, innovative services, devices, customer service quality and tariff plans) apart from price and affordability. Some 63 percent of customers believe their 5G Pacesetter service provider is better than other service providers on the market in network coverage, and 61 percent in network quality.

Besides scoring higher than the competition in most criteria, the 5G Pacesetters are also expected to lead their local markets in 5G. A clear majority of all smartphone users in the market (including 70 percent of their own customers) expect 5G Pacesetters to dominate the 5G race. Only 17 percent of their customers think otherwise, while the remaining 13 percent are not aware. In contrast, 51 percent of non-Pacesetter customers don't see their service provider as the leader in 5G.

Around 80 percent of 5G Pacesetters have the top or second-best net promoter scores (NPS) in their market. The 5G Pacesetters' NPS, a measure of loyalty and brand referability, was found to be on average 4.9 points higher compared to the rest of the service providers in their markets. Past studies from ConsumerLab have already shown that a superior 5G experience could help to lift NPS among early adopters,[4] and therefore is also a key indicator of success in the 5G Maturity Index. Besides a higher consumer rating on perceived 5G leadership, 5G Pacesetters also benefit from 32 percent higher ratings on perceived brand visibility and quality.

Figure 4: 5G Pacesetters are perceived as leaders in 5G



Of their own subscribers, 70 percent expect the average 5G Pacesetter to lead in 5G. Just 17 percent think otherwise, while 13 percent don't know.

70%

Over half of non-Pacesetter customers don't see their own provider as a leader in 5G.

51%

Investing in brand visibility and marketing of 5G – especially opportunities to experience new services – and communicating 5G achievements (test scores, rollout progress, new network features and their impact on consumer experience) have a clear correlation with perceived 5G leadership among consumers in our study.

[4] Ericsson ConsumerLab, 'Five ways to a better 5G' (May 2021)

Driving consumer demand for 5G

5G Pacesetters are able to drive consumer demand for 5G not just by improving the perception of network availability and coverage among consumers, but also via effective marketing and launching innovative services. 5G Pacesetters have around 50 percent more subscribers looking to upgrade to 5G compared to all other service providers, and a closer look at the data shows that subscribers of 5G Pacesetters are likely to stay with their current provider rather than making the switch. Of the total base, only 3 percent of 5G Pacesetter subscribers were looking to change providers for 5G, whereas 9 percent are planning to churn away from Aspirationals, 11 percent from Potentials and 13 percent from Explorers. Thus, 5G Pacesetters are three times more likely to retain their subscribers on account of a better 5G consumer experience and offering compared to other service providers.

5G is also shaping smartphone usage behavior, triggering usage of new apps and services like enhanced video, cloud gaming or AR. By virtue of launching new immersive services, 5G Pacesetters have also been able to trigger changes in the smartphone usage patterns of their customers. This in turn helps them drive usage, transition consumers to premium tier plans and monetize 5G successfully. On average, 5G Pacesetters have 50 percent more subscribers who report changes in usage of services like HD streaming and cloud gaming since they upgraded to 5G, compared to non-Pacesetters.

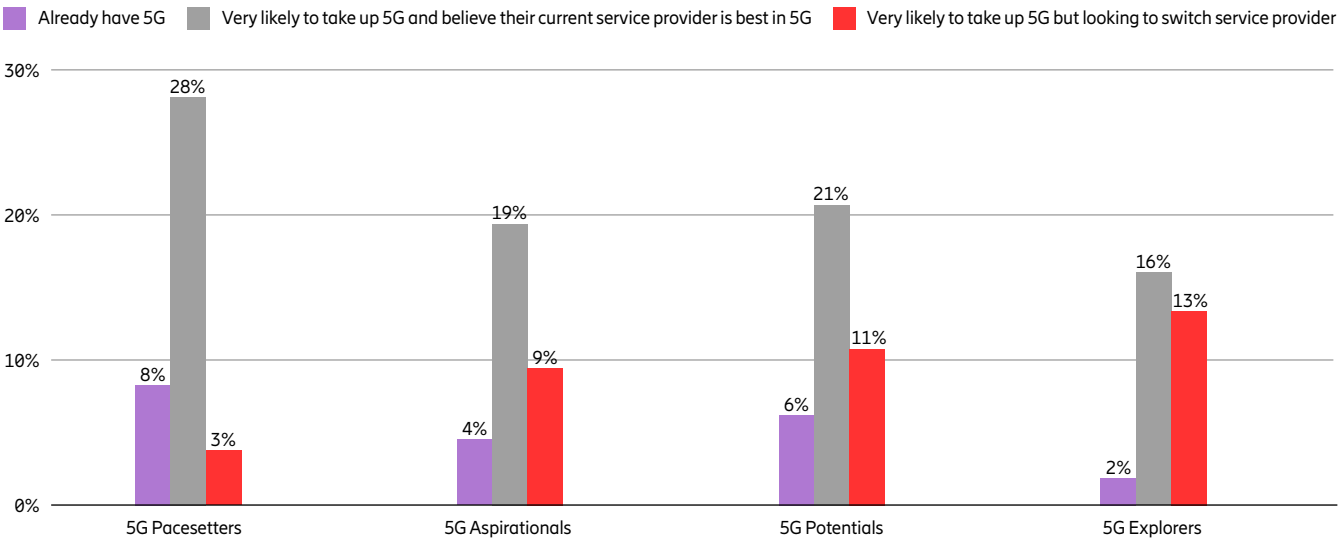
5G Pacesetters are at least three times more likely to retain their subscribers while driving consumer demand for 5G.

3x

5G Pacesetters have 50 percent more subscribers looking to take up 5G compared to other service providers.

50%

Figure 5: Consumer intention to take up and switch providers for 5G



Growing 5G consumer revenues

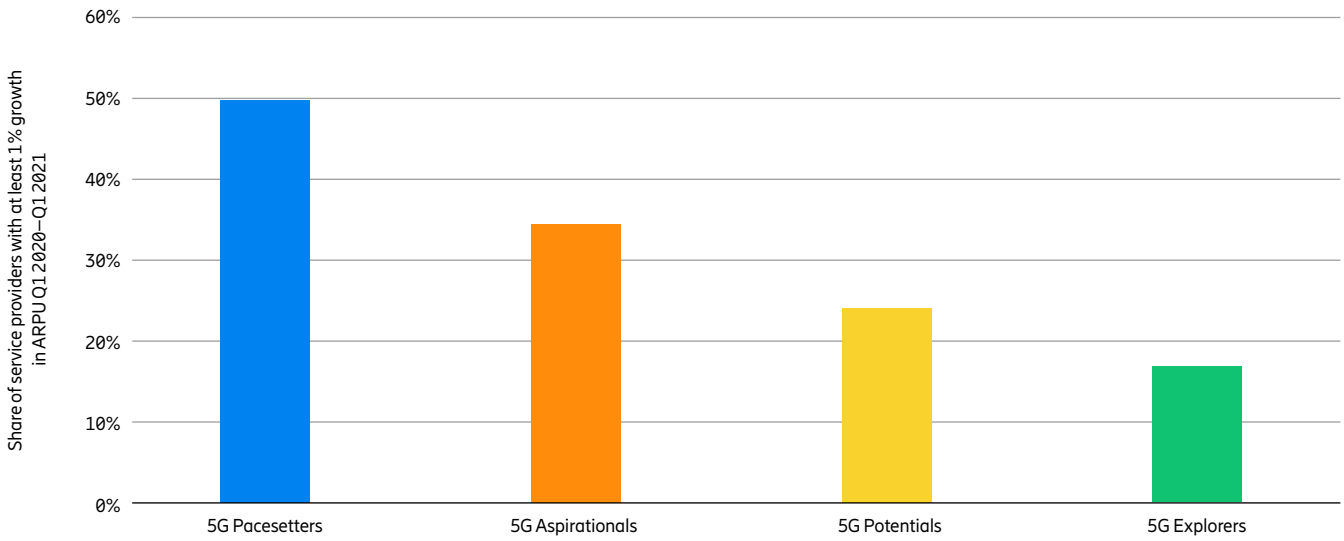
The second part of our analysis uncovers how the financial performance and business results vary by the maturity of service providers when it comes to 5G. Once the maturity stages among the service providers were identified, an analysis was done to understand the development of KPIs, such as ARPU and mobile services revenue, over the last year. As 5G launched in 2019, starting with Asia and the US, we're only able to put two years of performance under the lens. While it is challenging to assess whether 5G in and of itself drives higher ARPU, especially with a lack of public reporting and the differing ways in which service providers report financial KPIs, there are positive trends emerging on the horizon.

It should be noted that not all service providers charge a price premium for 5G, but despite the loss of roaming revenues due to the pandemic, 50 percent of 5G Pacesetters grew their ARPU by at least 1 percent between Q1 2020 and Q1 2021. In contrast, only 34 percent of Aspirationals, 24 percent of Potentials and just 17 percent of Explorers were able to witness a positive development in ARPU. While this is not the result of 5G alone, in the case of 5G Pacesetters, the ARPU uplift is largely attributable to the service providers' success in migrating consumers to premium 5G plans. The ARPU growth of 5G Pacesetters in our study varies between 1.1 percent and 12.7 percent during this period. This is an especially encouraging sign when it comes to reversing the trend of ARPU decline in the industry.

5G Pacesetters are two times more likely to grow ARPU and mobile service revenues compared to other service providers.

2x

Figure 6: 5G maturity stages and share of service providers with at least 1 percent growth in ARPU Q1 2020–Q1 2021

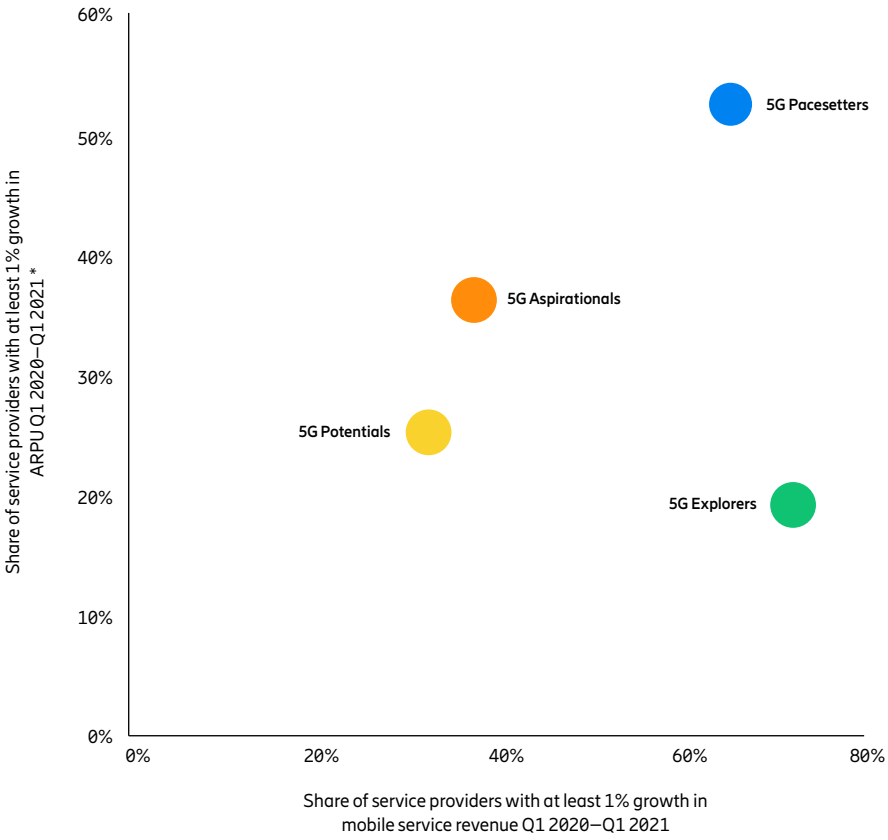


Not only could a higher share of 5G Pacesetters grow their ARPU year-on-year, but some 53 percent grew their mobile service revenues by 1 percent or more during the same period, while 20 percent saw their revenues decline by at least 1 percent. During this period, some 5G Pacesetters were even able to grow mobile service revenues by 7–8 percent. In contrast, only 30 percent of other service provider segments saw a positive development in mobile services revenues, and about half experienced a decline. Surprisingly the 5G Explorers – often the price challengers in their respective markets – were able to quickly grow their top line. However, although 60 percent of 5G Explorers grew mobile service revenues on account of market share gains, many were not able to translate this into ARPU growth.

A key contributor to the 5G Pacesetters' ARPU growth is pricing innovation. 5G Pacesetters are in markets that have adopted unlimited data volume options as part of wider mobile broadband subscription offerings. Despite this, 5G Pacesetters are devising ways to monetize based on 5G's new value beyond just flat-rate unlimited offerings. Some 75 percent of them upsell consumers to premium 5G price tiers based on speed, quality of service or inclusive content, compared to only 43 percent of 5G Aspirationals and 10 percent of 5G Potentials. None of the 5G Explorers operate this kind of premium price tiering.

To improve consumer appeal and retention, some 70 percent of 5G Pacesetters also offer multi-user benefits in their 5G plans, and nearly 60 percent provide 5G as part of their FMC offering for households.[5] This includes offers such as bundling 5G mobile plans with home broadband, TV and streaming content, and landline. Furthermore, close to 70 percent of 5G Pacesetters offer immersive video or cloud gaming either bundled into their 5G plans or for an added fee. Meanwhile, only 14 percent of Potentials and none of the Explorers monetize with these new immersive services. Past ConsumerLab studies have also highlighted the importance of bundling new innovative services with 5G data plans, to meet consumer expectations and capture their willingness to pay a 5G premium.[6]

Figure 7: ARPU and mobile service revenue growth by service provider maturity



* Blended ARPU where reported, otherwise postpaid ARPU or approximation using ABPU, ARPA or reported revenue.
[5] Multi-user benefits: The higher number of mobile lines included in a plan, the higher the discount or savings on the plan.
[6] '5 Ways to a Better 5G'

Some 75 percent of 5G Pacesetters upsell consumers to premium 5G price tiers based on speed, quality of service or bundled content.

75%

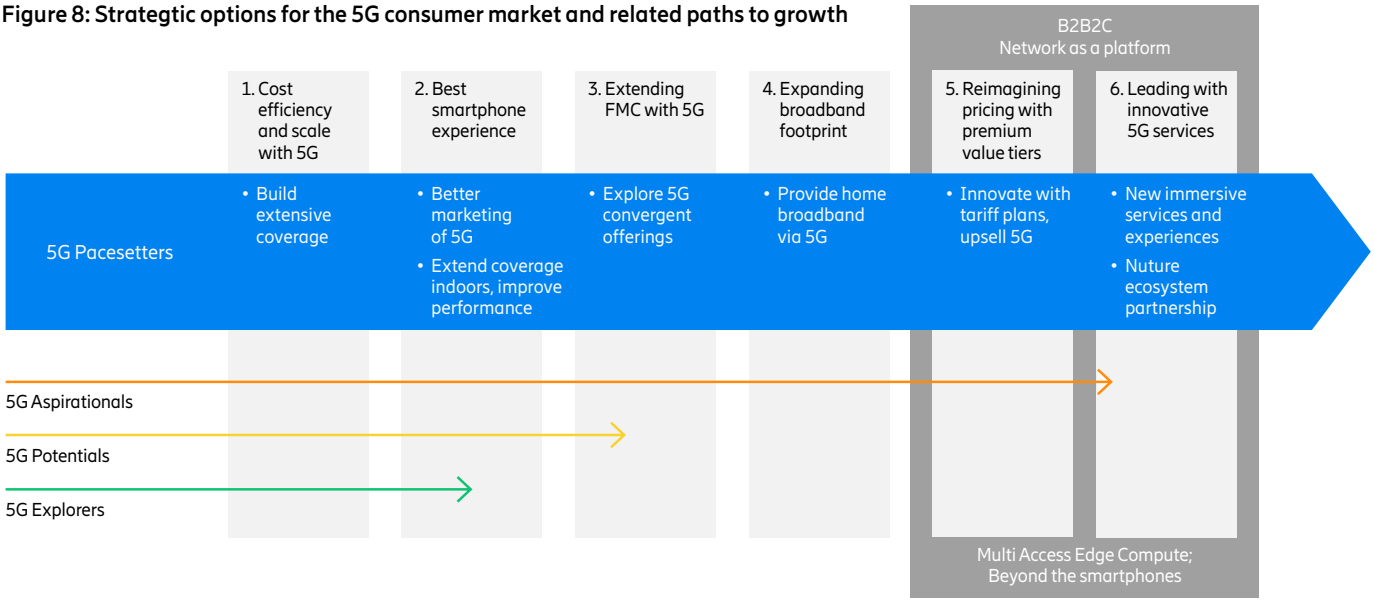
Strategies to succeed with 5G consumer business

The study identifies six different strategies, or strategic options, that successful 5G Pacesetters most often apply to 5G. Particularly in markets with higher-than-average data usage (above 10GB per subscriber per month, such as in China, South Korea, Taiwan and Finland), 5G Pacesetters and Aspirationals deploy 5G coverage quickly and extensively to realize a long-term, more cost-efficient production engine for mobile data, with the possibility of supporting a significantly higher traffic demand now and in the future. This is the fundamental strategy of 5G Pacesetters.

After ensuring cost-efficient operations, a cornerstone of every service provider's strategy is to provide consumers with the best smartphone experience by using 5G to boost capacity and speed, particularly indoors and in key locations where the usage is high. The third strategic option identified in our study, extending FMC with 5G, is where service providers with fiber, TV and entertainment, and mobile assets (particularly in markets like Spain, Italy, France and Germany) often bundle 5G mobile offerings into FMC plans for their household customers. Relying on the extensive 5G mobile coverage that complements their home broadband, these service providers' household customers benefit from a seamless fiber-like experience in and outside the home. Service providers have also been using 5G to complement their fixed broadband footprint in areas where fiber isn't available, or using 5G to explore new revenue streams in the broadband market using 5G FWA to compete with incumbent broadband providers relying on DSL or cable.

The fifth strategy is about reimagining 5G pricing strategy with premium value tiers. In markets where tiered unlimited data volume plans have become a natural part of consumer offerings, service providers have been successful in upselling customers higher value 5G plans or price tiers based on either quality of service, especially speed, or content. An alternate way of monetizing 5G is by offering innovative 5G services, in which service providers start to offer new immersive 5G service and event experiences for consumers to differentiate from a 4G experience.

Figure 8: Strategtic options for the 5G consumer market and related paths to growth



5G Pacesetters have been quicker than their competitors in successfully applying most or all these strategies, depending on market norms and local trends in offerings, for example, FMC plans or value tiers. The same can be said for 5G Aspirationals, although they have been slower to launch innovative 5G services and unable to drive 5G leadership perception.

5G Potentials benefit from relatively high consumer satisfaction and have so far relied on 4G, but as 5G competition has intensified, they have started to build 5G coverage to rival local competitors and to maintain cost-efficient operations. Contrary to the other 5G maturity stages, 5G Explorers have only launched 5G with limited coverage or limited offerings and are just starting their journey.

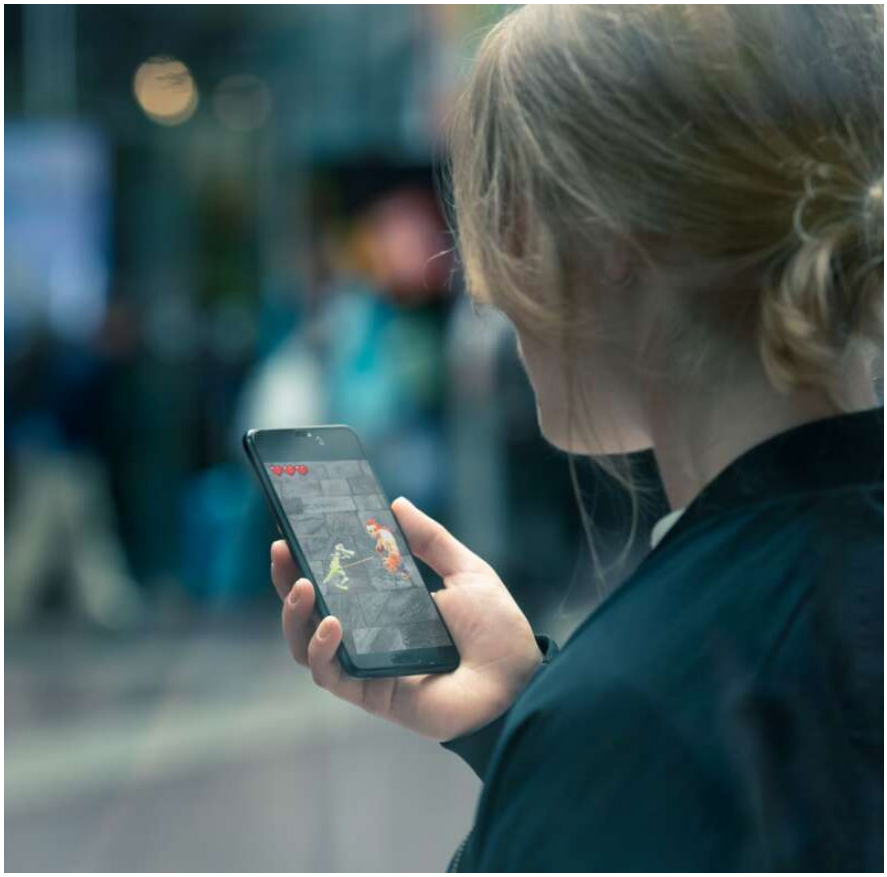
Based on these six strategies, different paths have been outlined to unlock growth and emerge as a 5G Pacesetter. These are highlighted with a few inspiring examples of service providers exploring these paths from across the globe, irrespective of whether or not they are currently 5G Pacesetters.

The paths to emerge as a 5G Pacesetter

Regardless of their 5G maturity level, all service providers can take actions to help them eventually emerge as a 5G Pacesetter. As we saw earlier, the Pacesetters in this study achieved a maximum of 62 points in our consumer research out of a possible 100, demonstrating significant room for improvement even among the most advanced 5G service providers.
5G Pacesetters are not defined in relation to other service providers, meaning it is possible for one market to have multiple, or even a majority, of service providers that can be defined as such.

Based on the six strategies already discussed, we have identified different paths service providers can take to emerge as, or improve their position as, 5G Pacesetters.

- Build extensive coverage and communicate milestones
- Improve marketing of 5G to gain perception leadership
- Extend coverage indoors and improve speed
- Explore 5G convergent offerings
- Provide home broadband on 5G
- Innovate with tariff plans by upselling to higher value 5G tiers
- Offer new immersive services and experiences to consumers
- Nurture ecosystem partnerships and programs for the smartphone and beyond



1. Achieve cost efficiency and scale with 5G

Build extensive coverage and communicate milestones
Inspiring examples of extensive 5G coverage build-out are emerging from all across the globe, including from Swisscom in Switzerland.[7] The service provider used its wide spectrum assets and infrastructure to quickly deploy and promote national 5G coverage. Swisscom communicates details of its 5G coverage for both its basic 5G and faster '5G+' services (NR at 3.5GHz), and population coverage for 5G was already 97 percent at the end of May 2021. As a result of its fast rollout and efficient communications, Swisscom scores a 17 percent higher consumer rating for perceived network coverage compared to an average global 5G Pacesetter in this study.

T-Mobile's 5G network build-out is another example of accelerated rollout to achieve network leadership. 5G is being deployed on dedicated low-band spectrum (600MHz) as a base layer for coverage, with the target to cover 300 million people (90 percent of people in the US) by the end of 2021. However, this target was met by T-Mobile six months ahead of schedule. The build-out of population coverage on the mid-band spectrum (2.5GHz) reached 140 million in early 2021 and is planned to grow to reach 200 million this year, with a target of reaching 300 million people by the end of 2023.

Another example can be seen in Taiwan, where 5G was launched in summer 2020, a little later than other markets in Northeast Asia. Far EasTone (FET) rolled out its 5G network rapidly, and by July 2021 it had installed more than 7,500 5G base stations, achieving population coverage of nearly 80 percent. Despite not having the largest bandwidth of spectrum in Taiwan, FET has been recognized by multiple third-party mobile analytics organizations for its leading 5G performance with 80 MHz of its 3.5 GHz spectrum. It was named as

[7] Swisscom: 'On "new" 5G antennas that have been in place for years' (2021)

Moveable unmanned 5G pop-up store – UNBOXED – powered by Singtel's 5G (mid-band and mmWave)

the national 5G speed test winner in January 2021 and the global winner in September 2021. The winning streak resulted from a combination of a large-scale, fast-paced 5G deployment and continuous network design and optimization. FET also highlighted its test wins in an advertising campaign for Taiwanese consumers.

The strategy of building out 5G coverage quickly, providing the best quality experience, and effective marketing played out well as FET's 5G customers are 20 percent more satisfied with their 5G network performance and have two times more users who perceive 5G availability to be good compared to other service providers.

Technology leadership, network performance and a differentiated customer experience has been a key strategy for Telstra. The service provider has accelerated its digital transformation and 5G rollout as an integral part of this strategic approach. As a result, Telstra achieved 5G population coverage of 75 percent, ahead of its externally committed deadline. The accelerated build-out and leadership in 5G reach and availability has strengthened its 5G market perception, which is higher than the average global 5G Pacesetter, with more than half of Australian consumers perceiving Telstra as the 5G market leader. Telstra plans to continue to set the pace, having already announced a target of 95 percent 5G population coverage by 2025.[8]

2. Deliver the best smartphone experience

Improve marketing of 5G to gain perception leadership

Singtel has used a creative way to introduce 5G to all consumers in Singapore, providing them with the opportunity to try out 5G-powered entertainment experiences by visiting Singtel's 5G experience zones, including its moveable unmanned 5G pop-up store – UNBOXED.[9] The store is powered by Singtel's 5G (mid-band and mmWave), making Singtel's services accessible 24/7, and enabling consumers to experience 5G speeds and 5G-rich digital applications such as AR books, VR entertainment, cloud gaming and 5G-powered e-racing using miniature model cars at Sentosa. Customers can consult with a roving robot to receive personalized recommendations, try out phones; conveniently sign up for mobile plans at video-assisted self-serve kiosks; and immediately collect their purchased devices. These efforts, coupled with its 5G network rollout, have influenced consumer perception with around 80 percent of Singtel's own subscribers – and 60 percent of all Singaporean subscribers – expecting Singtel to lead in 5G, higher than the score for the average global 5G Pacesetter (70 percent).

Extend coverage indoors and improve speed

There is often a discrepancy between service providers' communicated 5G population coverage and the actual share of time consumers are on 5G (5G availability). Much of this is explained by consumers spending most of their time indoors where 5G availability is lower today, and so coverage must extend here next to offer a seamless experience. Past ConsumerLab studies suggest that 5G indoor coverage at home and in public places, like malls and stores, is relatively more important than both 5G speeds and battery life in driving overall consumer satisfaction.[10] South Korea's service providers are working towards further extending the 3.5 GHz 5G coverage indoors in 2021. The coverage of 5G services at major facilities such as department stores, libraries and airports grew by 33 percent from a year earlier. As for coverage for transportation infrastructure, the three telecom firms offered 5G services at 835 out of a total of 1,028 subway stations. The service was also available at an average of 53 out of 54 high-speed KTX and SRT train stations.[11]

[8] Economic Times: 'Telstra aims to extend 5G coverage to 95% of Australia by 2025' (2021)
[9] Singtel: 'Singtel launches UNBOXED Lite 5G experience zones on Orchard Road'
[10] 'Five ways to a better 5G'
[11] Korea Times: '3 telecom firms offer higher 5G speed, greater coverage in 2021'

3. Extend Fixed Mobile Convergence offerings with 5G

Explore 5G convergent offerings
In some European markets that have a long tradition of convergent plans for the household, service providers are now extending 5G exclusively, or at preferential rates, for their fixed-mobile convergence customers. Deutsche Telekom is a good example of a service provider that is using a fixed mobile convergence product, MagentaEINS, to drive 5G adoption, allowing also for multi-user benefits within the same plan.[12] Deutsche Telekom's MagentaEINS offers a single contract that covers all services at home and on the move. The integrated product now gives consumers the option of buckets or unlimited 5G mobile data and home internet connection. Deutsche Telekom has also redefined the notion of community with MagentaEINS, allowing anyone choosing this plan to invite additional community members to avail the same benefits at preferential rates. By doing this the service provider drives 5G adoption using additional community connections.

4. Capture new revenue streams in home broadband

Provide home broadband on 5G
In areas where service providers cannot supply fiber, service providers have started looking at 5G as a fixed broadband replacement, addressing consumers with a home broadband offer using 5G FWA.

Verizon in the US was the first to launch 5G with its '5G Home' offer that complemented its fixed broadband footprint.[13] This plan is non-binding, affordable and easy for customers to install by themselves.

T-Mobile US has also launched a similar proposition, 'T-Mobile Home Internet',[14] which today covers a footprint of 30 million households. This increases the number of choices available to consumers in the US for 5G FWA.

Consumers are looking at 5G FWA offers to include additional services similar to what they would typically expect from fixed or cable broadband providers. Two-thirds of consumers across 26 markets in a ConsumerLab study[15] rated 5G TV, an aggregated streaming service bundled with 5G FWA, to be a service worth paying a premium for. Hence, beyond just offering connectivity, it is essential to enhance the 5G FWA offering with live TV and streaming options to make the 5G FWA proposition more attractive, something that service providers in the US do well by bundling streaming services.

5. Reimagine pricing with premium value tiers

Innovate with tariff plans by upselling to higher value 5G tiers
In markets where unlimited data volume options have become the norm (for example, in Switzerland and Finland), operators have had to explore ways to upsell higher value plans or price tiers to customers. So far, these have been based on speed, prioritization of traffic and/or inclusive entertainment and content. A good example is Elisa in Finland, a service provider that has been successful in upselling the highest 5G speed tiers.[16] The company has already reported an increase of over EUR 3 in ARPU for customers upgrading from 4G to 5G.

[12] Deutsche Telekom: 'The MagentaEINS Plus revolution'
[13] Verizon: 'Verizon continues to expand 5G Home Internet to customers across the country'
[14] T-Mobile Home Internet
[15] 'Five ways to a better 5G'
[16] Elisa: 'Interim report Q2 2021' (July 2021)

Conclusion

Regardless of their place in the four 5G maturity stages, all service providers can benchmark their 5G progress against today's 5G Pacesetters. An analysis of the 5G Maturity Index shows that the above paths have the greatest impact on the overall index performance. By focusing on the six strategies and their related paths, more service providers can emerge as 5G Pacesetters, win in the eyes of their consumers and successfully monetize 5G.

6. Lead with innovative 5G services

Offer new immersive services and experiences for consumers

Alongside premium price tiering based on speed, another way service providers are monetizing 5G is with bundled subscription video-on-demand services and also new immersive 5G service and event experiences for consumers. ConsumerLab research conducted in May 2021 suggests that 5G users seem to be satisfied with network speeds, however 70 percent are dissatisfied with the innovative apps and services bundled in their 5G plan.[17]

Many service providers are trying to augment successful service concepts or introduce new immersive experiences for their consumers. EE in the UK is in a unique position as a 5G service provider in that it is also a sports broadcaster. When launching 5G it added new immersive features to the BT Sport app.[18] This included 360-degree viewing, 'Watch Together' live video chat with friends in a split-screen mode, and real-time stats and graphics projected on the pitch with 'Manager Mode'.

By adding 5G-relevant features to existing popular digital services, in this case AR, service providers can quickly showcase how 5G can enhance existing experiences. Service providers in Asia, on the other hand, have both curated 5G-specific apps and services from scratch while also enhancing existing services.

SK Telecom in South Korea has a growing portfolio of immersive 5G services and platforms – notably its metaverse platform, 'ifland'. It began operating its mixed reality capture studio called 'Jump Studio' in April 2020. Then, in July 2021, it popularized social VR by rebranding the platform as 'ifland', which it aims to position as a major metaverse platform in the 5G era.[19] The first month after its launch, the download rate doubled and its active users increased by over 24 percent. Moreover, access to SK Telecom's main content offerings – 'FLO' (music streaming), 'wavve' (video streaming), 'V Coloring' (video ringback tone), gaming pass and/or bookstore (app) – are bundled into its high-end '5GX' plans. Although not exclusive to 5G, customers on its high-end '5GX' plans can purchase these new immersive services at discounted rates. It comes as no surprise that SK Telecom consumers report being more satisfied with innovative services offered compared to consumers from other providers.[20]

Nurture ecosystem partnerships and programs for the smartphone and beyond

Many of the service providers in this study, especially those from the US like AT&T and Verizon, have also developed best-in-class partnerships that boost their 5G propositions and differentiation. Verizon's industry partnerships in 5G are a good example of this.[21] They support Verizon's "Network-as-a-Service at Scale" strategy, which allows its partner brands to reach out to Verizon's entire customer base and for Verizon to deliver curated experiences to differentiate in a competitive consumer market. Some of these partnerships are already visible for Verizon's 5G subscribers, such as the immersive sports content delivered in partnership with the NFL, NBA and NHL.

The opportunities to create and deliver new services with better consistency, reliability and performance will grow exponentially with the introduction of new technologies such as 5G standalone, network slicing and MEC. The possibility to develop tailored offerings with guaranteed QoS (such as latency) coupled with preferred content, such as cloud gaming or extended reality (XR) for particular consumer segments will increasingly become a reality. True 5G wearables such as mixed reality glasses that operate independently of the smartphone and interact with sensors in public places (for example, buildings, streets, cars or airports) and the cloud will further help transform the 5G network to a B2B2C engine for brands and content partners to deliver their services and experiences effectively over the 5G network platform.

In early 2020, Ericsson launched a new program, Ericsson Startup 5G, to allow various ecosystem players and innovative start-ups developing consumer services to leverage the characteristics of the 5G network platform.[22] This new program curates a network of global start-ups, connecting them with a set of leading service providers to accelerate commercialization of innovative 5G applications and services. The program plans to incorporate 40 start-ups by the end of 2021 and partner with over 12 participating service providers by the end of 2022.

[17] 'Five ways to a better 5G'
[18] EE: 'EE Unveils UK's Most Immersive Sports Viewing Service'
[19] SKT Unveils New Metaverse Platform 'Ifland' (July 2021)
[20] 'Five ways to a better 5G'
[21] Verizon: '2Q 2021 Earnings Conference Call Webcast'
[22] Ericsson Startup 5G

About Ericsson

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