



5G Positioning and Pricing Strategies: Driving to 5G Success

A New Era Calls for New Approaches



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5G Positioning and Pricing: Report Objectives

- **Driving to early 5G success:** 5G development has entered a stage of early commercial deployments in multiple lead markets, with many other commercial launches anticipated over the next 12-18 months. Communications Service Providers (CSPs) need to move now to more specific development and execution of go-to-market strategies for 5G as a part of their service portfolios.

➔ **How 5G is positioned, packaged and priced** for various end-user segments will be critical to a CSP's success in building its competitive position and driving uptake and monetization.

- **Key questions for CSPs:** How should CSPs develop **innovative** and **progressive pricing** and **positioning strategies** in support of 5G services?

➔ This report addresses the question by delving into findings from **consumer insights** on 5G at this early market stage as well as current **thinking among leading CSPs** from around the globe about 5G positioning & pricing strategies.

- **Call to Action:** CSPs need to become more innovative in addressing customer pain points and creating “wow” factors to drive adoption and spend on 5G. CSPs must be ready for flexible approaches to 5G pricing and expand digital engagement across user segments.

Positioning Strategies

Should 5G be positioned as “just another G” with marginal evolutionary benefits over existing 4G services? Or, a “quantum leap” in mobility service offerings with a sufficient **value delta over 4G** services that can be positioned and priced for?

Pricing Strategies

What **models** and **pricing mechanics** should CSPs be adopting to encourage uptake of 5G services and plans? How should CSPs be looking to **innovate in pricing** models for 5G to drive migration from 3G and 4G services and monetize 5G?



Driving toward 5G Success: Report Findings & Recommendations

Prepare for 5G Success: Think beyond launch

Be Customer Centric

- **Customer satisfaction with 4G mobile broadband is good** and thus customers must be convinced of value of upgrading to 5G.
- **Moving beyond early adopters** to the early and late majority with sustainable monetization offerings is critical to the success of 5G.



CSPs need to position 5G services to **solve customer pain points** and **“wow” customers** with new experiences/uses to attract them to 5G

Be Ready for 5G Pricing Flexibility

- **Early stage 5G services thus far mainly focus on more data faster**; there has been a lack of services and activities that offer new, innovative immersive experiences specifically enhanced by 5G



CSPs need to **be more imaginative** at launch AND give themselves the **flexibility to adapt quickly** to rapidly changing market conditions to address a wide range of customers, partners & competition

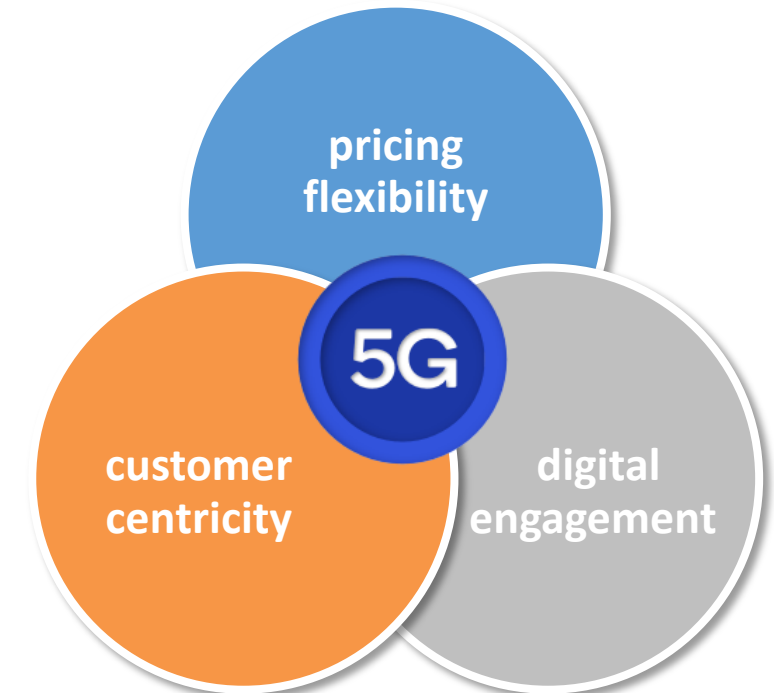
Use Digital Engagement

- 5G arrives as demand for real-time interactive engagement on mobile devices is increasing. CSPs see a greater role for **real-time, self-care apps** in the 5G era to address digitally savvy users, enterprise desire for more control & visibility, and save costs.



CSPs need to **expand digital engagement** in order to drive additional discovery, needs-based upsells among 5G users

5G Imperatives





Driving toward 5G Success in the Near-to-Mid Term

5G Success: What will it Take?

In the near-to-mid term, the key to faster payback on 5G investments is to create a pull to get the next wave of users to upgrade to 5G beyond the initial early adopters.

Situation

- CSPs have not yet figured out how best to drive 5G adoption to mass market and monetize services
- 5G positioning and pricing will evolve

Needs

- CSPs need to expand thinking on how and what they offer customers with 5G – across all user segments
- CSPs need to expand their role in the 5G ecosystem

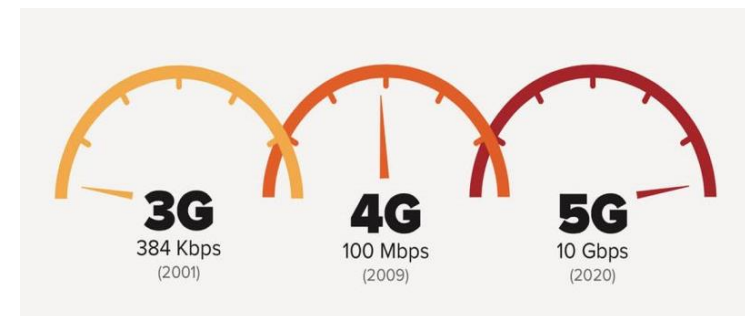
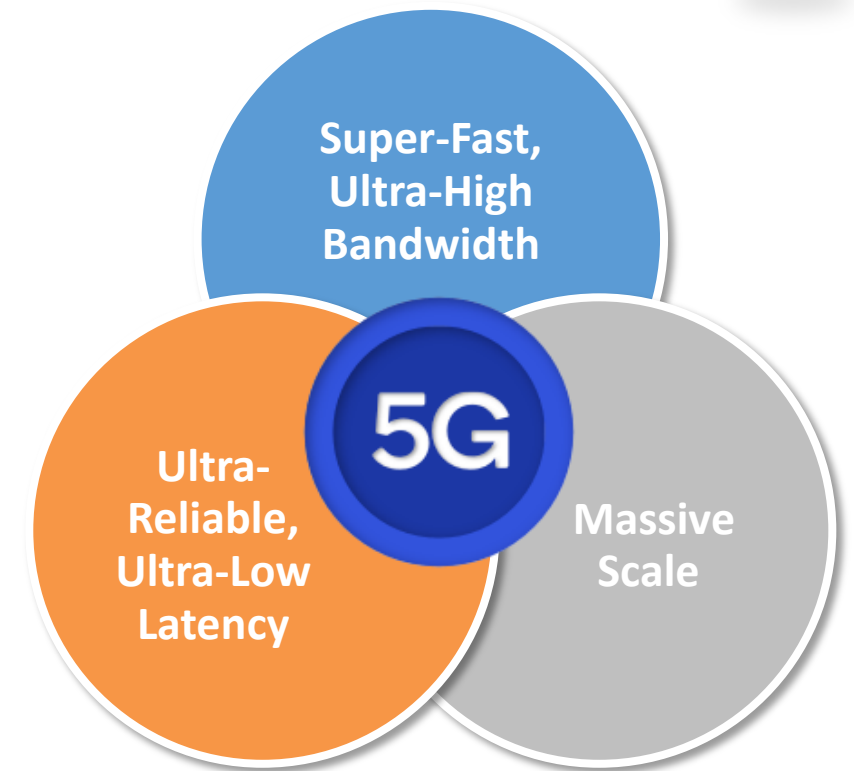
How?

- CSPs must be customer-centric and find ways to use 5G to solve customer pain points and “wow” customers with new experiences/uses to attract them to 5G
- CSPs need to expand digital engagement in order to drive additional discovery, needs-based upsells among 5G users

Positioning 5G: Where to Focus?

Key messages to drive adoption need to address benefits for each user segment that are:

- 1) Communicable
- 2) Monetizable





Key Trends that Dovetail with Timing of 5G Service Expansion

Key Trends

- **Multiplay bundles** for consumers and **fixed-mobile convergence** for enterprises are growing in multiple markets
- For a number of individuals, **wireless is the main mode** of accessing the internet and video
- **Digital engagement** through **self-serve** options is creating more opportunity for subscribers to make ad hoc changes, track usage, and discover/explore and select new add on service options
- Advanced analytics and Machine Learning/Artificial Intelligence (ML/AI) enable increased **personalization of offers**
- Solutions for rating and charging for **services are much more flexible and real-time**, enabling new pricing options and faster time-to-market for new offers as well as **more complex partnership models** for service add-ons from third-party providers
- Large CSPs are building **platform approach** to better work with partners and enable services to be integrated into their networks (eg expose network capabilities w APIs, Billing-on-behalf-of models)
- Enterprises are undergoing **digital transformation** and implementing **IoT** strategies

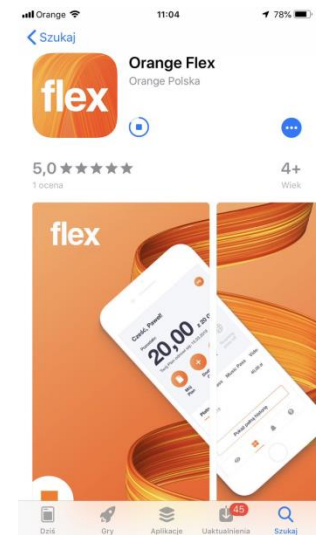
5G positioning and pricing strategies need to be developed and evolved with these key trends in mind

5G Arrives as Demand for Real-time Digital Engagement Ramps



- Consumers expect more contextual, personal interaction from brands, when they want it and where they want it, as experiences today are shaped by leading digital native brands like Facebook, Google, Uber, Amazon, Airbnb, WeChat and other digital giants.
- An increasing number of CSPs around the globe realize the **importance of high-quality, real-time digital engagement tools** to attract and retain customer segments that are accustomed to digital engagement provided by internet brands.
- **Digital engagement through self-serve** options is creating more opportunity for subscribers to make ad hoc changes, track usage, and discover/explore and select new add on service options.

5G arrives as demand for real-time interactive engagement on mobile devices is increasing. Operators should seize the opportunity to accelerate their use of self-care apps to expand customer centricity and personalization, addressing demands of digital-centric users and at the same time reducing the cost to serve.





Key Challenges to Consider

Challenge: data commoditization

- **Challenge:** 5G will evolve in its real world capabilities over time. Will introductory pricing schemes in early stage 5G with more limited coverage and reliance on 4G—when slicing is not yet implemented—limit operators' ability to monetize in later stages of 5G?
 - Early stage “just another G” price competition with unlimited offers could increase risk for commoditization of data services and limit the ability to deliver 5G services profitably
 - Does lower cost per bit of data delivery on 5G justify price cuts?
 - If data is commoditized, can other items be monetized successfully by CSPs? Do these other items incur costs to the CSP (eg, cost to acquire or develop premium content)?

Challenge: high 5G device costs

- **Challenge:** 5G services require a new 5G device – and initially higher prices for 5G devices than 4G devices can be a barrier to adoption. What percent of users upgrading will purchase a 5G device? Will 5G act as a catalyst to spur faster replacement cycle for smartphones? Will more operators move to Equipment Installment Plans (EIP) or offer substantial device promotions to encourage faster upgrades to 5G?

Challenge: driving 5G demand

- **Challenge:** Many customers just want service that addresses their needs – do they care what network delivers the service? How should CSPs promote 5G benefits to drive 5G adoption, especially when customers may frequently be using 4G networks outside of 5G coverage?

Challenge: how to simplify plans

- **Challenge:** How should operators be looking to rationalize and simplify their pricing plans, and remove the myriad of complexity from previous generations? Is 5G an enabler or inhibitor to that desire? How do CSPs reconcile the need to simplify plans with goal to better target segments by moving away from one-size-fits-all or basic S-M-L tiers – will the focus be on simple tiers of base offers and most uplift will be with ad hoc, personalized add-ons promoted both at initial sign up as well as on device based on user behavior?



Capturing the Voice of the Customer

Background Research and Use Case Selection

Should 5G be positioned as “**just another G**” with marginal evolutionary benefits over existing 4G services? Or, a “**quantum leap**” in mobility service offerings with a sufficient **value delta** over 4G services that can be **positioned** and **priced for**?

To probe consumer insights into this question, Strategy Analytics' UX research team carried out an extensive scan of **websites, articles and reports** from 5G technology developers and academic resources, identifying more than 50 proposed use cases of 5G that provide direct benefits to consumers. Through comparing these use cases and grouping them into similar themes, **12 candidate use cases** were selected for consideration.

Primary Research

Strategy Analytics researchers conducted **focus groups** with **30 consumers** in Milton Keynes UK and San Diego, USA in early 2019.

After preliminary discussion of **awareness/attitudes towards 5G** and satisfaction with their current mobile data experience, researchers explained that, while 5G will produce significantly upgraded speeds, additional benefits will be derived from **ultra-low latency, wider coverage, higher capacity** and improved **reliability, stability** and **security**.

SA then explained each of the 5G use cases to the groups and asked participants to provide individual feedback on **interest level**. Participants then discussed each use case, **how** they would use it and any **concerns** that they had.



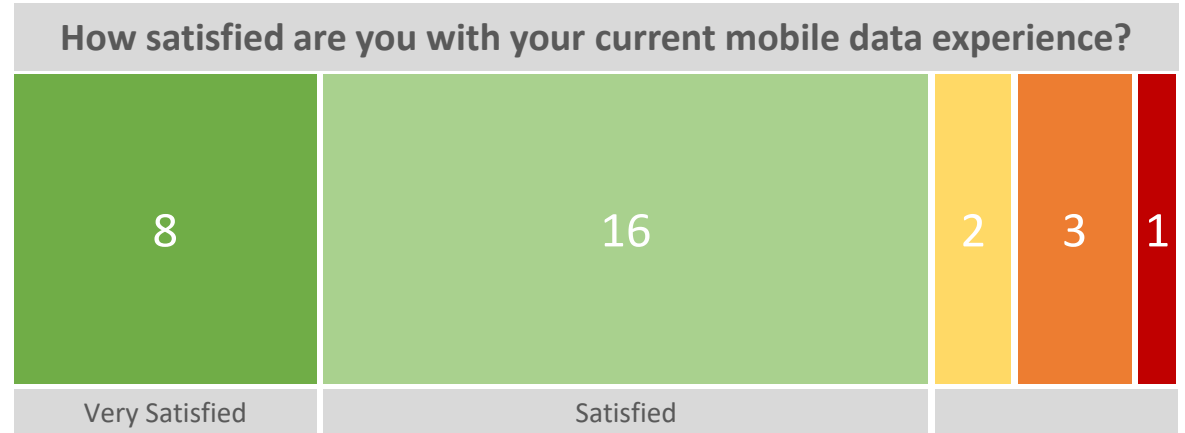


Satisfaction with 4G is High, so 5G Needs New Value Propositions

Consumer **satisfaction** with the current 4G mobile data experience **is high**. 24 out of 30 participants in this study said that they were either satisfied or very satisfied with their current mobile data service.

- Those least satisfied were found to live in (or frequently visit) remote areas where **lack of coverage is the main issue** rather than speed or reliability.

Since most are satisfied with their current service, operators must create **compelling, differentiated 5G experiences** if they want to motivate customers to adopt 5G plans. Currently, **most do not intend to consider upgrading to 5G** until they are ready to look for a new smartphone.



*I have **enough data** to last me the whole month and I am always outside of WiFi. I have connection almost everywhere - the **reach is great**. Always **fast, never drops out**.*



*95% of the time I am in the metro area and I can't complain for the most part. [4G] is up to speed, it's **pretty fast** for what I use it for. If I need to connect my laptop, I won't even look for WiFi as it's too cumbersome, I would rather **use my phone's hotspot**.*



*I'm not going to go out and get [5G] prematurely. I think there will be so many **glitches** when it comes out. I have **no issues** with my 4G, so I am not eager to try it. I'll consider it only when I'm **due to upgrade** my phone.*



*To some extent these new technology advancements are just a **marketing ploy** to allow the carriers to raise prices. I've only had my phone for less than six months, so I by the time I'm looking for a new phone, 5G should be **incentivized**.*



Network-Related and Device-Related Concerns Must be Overcome

Consumers have a number of concerns about 5G. Some are related to **commercial aspects of the network technology** (when it will be available, how much it will cost etc.) while others are **device-related concerns** (the impact 5G will have on device battery life, whether they will need better accessories to fully experience the new services delivered by 5G etc.)

WILL IT LIVE UP TO THE HYPE?



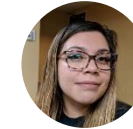
“Mobile companies always say this will be the greatest thing ever and it will be lightning speed. But it’s only like that for the **first people to get it**. As soon as everyone has upgraded, it will be back to the same as it is now”.

WHEN WILL IT BE AVAILABLE?



“It will take a year for it to come to where I work and then probably another year after that to come to where I live. I won’t even consider it until I know it’s available **everywhere**”.

HOW MUCH WILL IT COST?



“The companies need to make their money back, so I understand that my monthly bill will go up – but it has to be **worth it** in terms of improvement. But what I’m more worried about is how **much the phone will cost**. They are already ridiculously expensive”.

WILL IT DRAIN MY BATTERY?



“I play a lot of PS4 games and if the experience could be replicated then I would be very interested. I would just be concerned about the **drain on my battery**. I want to know I can use it for games but still have enough left to get me to the end of the day”.

WILL IT DRIVE MORE SCREEN-TIME?



“I’m just concerned that if you can get more coverage at the football stadium then people are going to be spending **more time with their heads down** on their phones rather than watching the match”.

WILL I NEED NEW ACCESSORIES?



“These [immersive experiences] all seem so cool, but then you need to have better audio too. Speakerphones suck, so I **assume you’d need a speaker**. Maybe with a Bluetooth headset it would be more enjoyable”.



Most Consumers Interested in 5G, But Must be Convinced of the Benefits

After discussing the benefits and the key possible use cases of 5G, most participants were **positive** about the potential for 5G to deliver **new, exciting value propositions**. 7 out of 30 participants said that they were **ready and motivated** to sign up to a 5G contract as soon as possible, and a further 16 out of 30 were **interested**, with the **caveat** that they would want to see whether the reality of 5G **lives up to the hype**.



Consumer attitudes towards 5G range from the classic **lead adopters** who are excited to be among the first to experience any new technology, through to those who are sceptical that it is 'just another way to extract more money from consumers' and see no need to adopt. Strategy Analytics believes that the second group of consumers—those with some interest in 5G but with an initial “wait and see” attitude—will be the **key segment** that will determine how sustainably successful 5G is post the initial launch euphoria and early adopter 'frenzy'. **They will need to be 'wowed'** by 5G services and will be looking for a sufficient **value delta** over 4G services to encourage them to upgrade and pay more for this additional value.



Focus 5G Messaging on New Experiences and Solving Pain-points

To drive 5G adoption service providers should focus messaging on **exciting new experiences** and the technology's ability to **solve existing pain points**

RICH EXPERIENCES DELIVER THE 'WOW'

5G's ability to **deliver 'wow' moments** through low-latency rich media experiences such as **holographic telephony, augmented** and **virtual reality** has the potential to capture the attention of consumers



"5G would be great for skills based **lessons** for my kids. And **holographic conversations** would be amazing."



"**Augmented reality navigation** for running or cycling would make things much easier and deliver peace of mind. And it's so cool!"



"I would like 5G **built into my laptop**. There are a lot of times where I'm on the go and this would help with time sensitive items. It would be very useful to be able to **edit graphics intensive documents**, or co-edit the same file with others at the same time."



"I love the idea of **holographic video calls**. The ability to bridge the divide for those in different countries would be amazing, like for family occasions where you cannot attend".

IMPROVED SPEEDS & CAPACITY ADDRESS PAIN-POINTS

At the same time, the **technical enhancements** of 5G offer the potential to address current pain-points. These are also strong motivators of adoption.



"When my wife is downloading Netflix films, I just can't do anything on my phone or tablet, it **kills all the network**."



"Sometimes lots of us are editing the same files at the same time so there is a lot of **lag** around these things, it's a horrible experience".



"It's annoying when it says you have 4G on your phone but you can't send a WhatsApp. Particularly in **busy areas** like in a gig or a football game, my mobile just won't load any data".

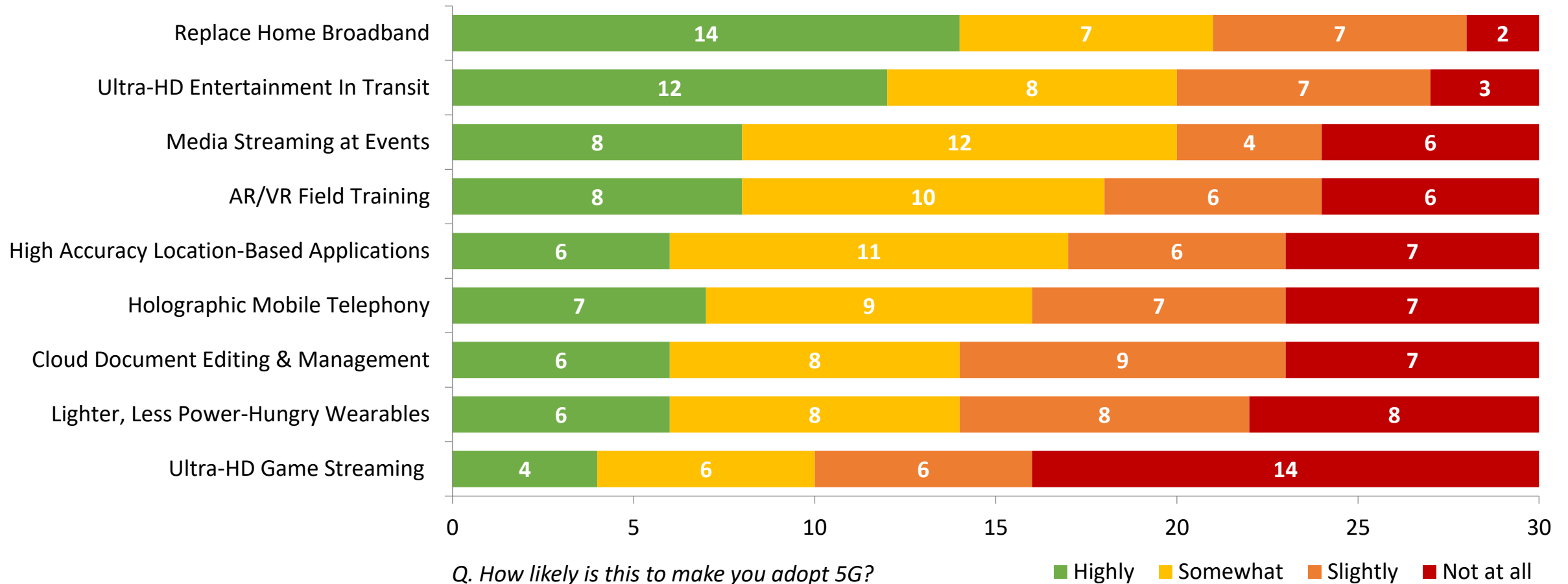


"It's like when I'm **driving on the motorway**, which I am every day, Spotify just doesn't work well, like it's not downloading, I have 4G on my phone but it won't load".



Summary: Use Cases that Solve Consumer Pain-points Most Popular

Of the near-to-midterm 5G use cases discussed with participants, **Home Broadband Replacement** was the most popular. If 5G can deliver similar speeds to fixed broadband and prove reliable, it has the potential to be a serious disruptive influence in the broadband market. Other use cases of highest interest are those that **address current pain-points** (ability to get connection in congested areas or in fast-moving vehicles).





Key Conclusions from Consumer Focus Groups

Opportunities

- Despite high levels of overall satisfaction with their current mobile data experience, **consumers express strong interest in 5G overall**, once the benefits and use cases are explained to them
- 5G opportunities fall into three major domains: **Next Generation Media Experiences, Connected Objects** and **Fixed Home Broadband Replacement**.
- Consumers are highly interested in 5G to replace their fixed home broadband as long as it can deliver the anticipated **improvement** in speed over 4G; it is **reliable** and if it is **cheaper**
- Other use cases of highest interest are those that **improve safety** or address current pain-points (ability to get connection in **congested areas** or in **fast-moving vehicles**).

Risks

- Consumer satisfaction with the current 4G mobile data experience is **high**. Therefore, operators must create **compelling, differentiated 5G experiences** if they want to motivate customers to adopt 5G plans.
- Moreover, while understanding of the benefits of 5G is currently extremely **limited**, consumers already have **concerns** about 5G: When it will be **available** where I live? How much more it will **cost**? What impact will it will have on my **battery life**? etc. These must all be addressed to ensure mass adoption.

Recommendations

- Specific effort must be made to **address consumer scepticism around the need** for 5G. Since the technology evolution is about more than simply “faster upload and download speeds”, consumers will need more convincing that 5G is not simply “a **marketing ploy** to allow the carriers to raise prices”.
- Operators must educate consumers about the benefits of 5G. Promotion should focus on the most compelling aspects of 5G, i.e. the ability to **solve existing pain points**, especially **improved connectivity potential** in high network demand situations.



Digging into Operators' Current Perspectives on 5G

What are CSPs' Perspectives on 5G?

Strategy Analytics conducted qualitative interviews with a range of CSPs

To probe operator insights, Strategy Analytics conducted qualitative research through a series of executive interviews with a range of leading CSPs around the globe to assess their perspectives and strategies on how to position and price 5G in the early go-to-market stages of 5G. Interviewees were offered an opportunity for their comments to remain anonymous, or to be quoted, and included a range of positions and focus areas, including:

- 5G service planning and pricing for consumers
- Network teams
- C-level executives
- IoT and enterprise/B2B product and service teams

The following slides capture key perspectives from interviews with operators, as well as public comments, on a series of key questions about 5G positioning and pricing approaches.

Korean operator:

“It is hard to differentiate in the long term based on network coverage/quality or on price levels, so the main focus for us for 5G commercialization has been about creating a set of compelling 5G services available for free for all 5G subscribers.”

“4G speeds are already high, which makes it hard to upgrade subscribers to 5G without services.”

European operator:

“Everyone likes to talk about use cases and new things 5G can bring but fact is 4G is pretty good where not congested and 4G is improving.”



5G Positioning and Pricing in Context: Big Picture Considerations

5G Launches: Key Big Picture Considerations

Development of approaches to 5G positioning and pricing needs to take into consideration a range of factors. Orange VP Consumer Marketing Europe James Stoker highlighted 5 big picture points that they take into consideration as they develop their approach to 5G positioning and pricing in each of their markets:

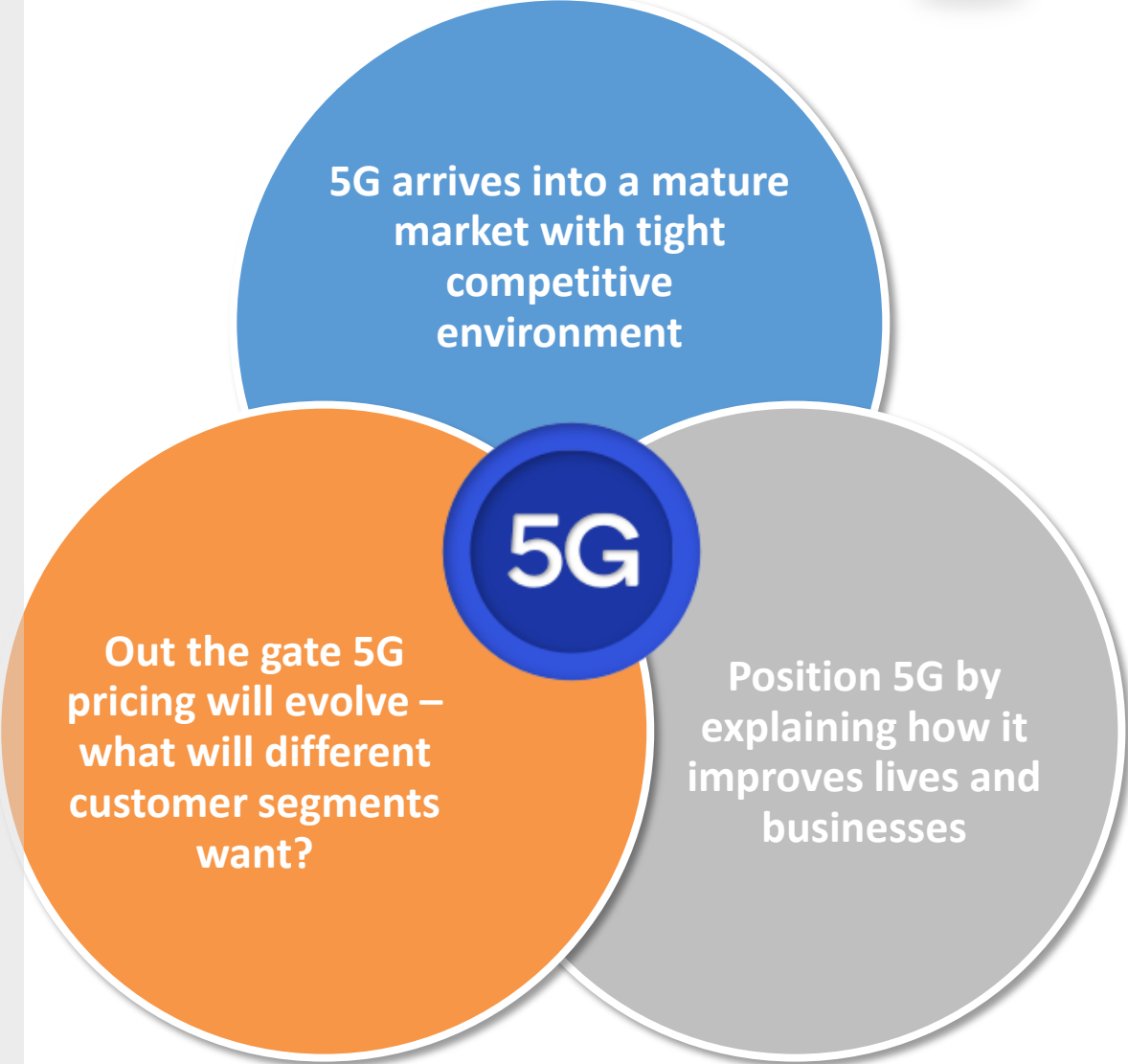
- 1) Convergence
- 2) Market position
- 3) Competitive landscape
- 4) Customer readiness
- 5) Network/spectrum



Focusing on 5G Making Lives Better

Orange’s Regis Ruhlmann, Group Deputy Marketing Director, noted that they will focus on showing how 5G is making people’s lives better:

- Smoother video
- Faster download
- Show easiness of use/benefits of 5G but not too exotic
- Smooth experience
- Better quality of network





Positioning 5G alongside 4G Services

When you are thinking about how you position 5G alongside your 4G current service portfolio, are you focusing on 5G service as just enhancing what users do today with 4G, or on new services and experiences?

EVOLUTION FOR CONSUMERS, NEW FOR ENTERPRISE

“In consumer market, 5G should be an evolution of today's 4G service. In enterprise market, there should be something new.” - *Tier 1 operator APAC, pricing strategy manager*

“In consumer market, today's 4G strategy will be generally kept. 5G will be seen as an enhancement of today's 4G. In enterprise market, the situation is different, 5G should be able to provide new capabilities that today's 4G has not. “ - *Tier 1 operator APAC, senior manager 5G planning and service development*

5G AS A WHOLE NEW GAME

“In 4G we are serving customers, in 5G we will be serving societies” -*Enrique Blanco – GCTIO Telefónica*

“We see 5G as a platform play and we are still working to figure out where the best bets are” – *Strategy Group Product Manager/Innovation, EU Telco*

5G is not just about connectivity like 3G to 4G but another way to see the [telco] business, especially for enterprise; when the 5G ecosystem is emerged there will be disruption from [the focus on] connectivity- *Alexis Hostos, Telefónica B2B Head of Product Strategy*

IMPROVE SPEED & CAPACITY

5G delivers an “infinite capacity sensation”-*Enrique Blanco – GCTIO Telefónica*

“We think 5G is worth the premium we are charging” -*SUNRISE, Switzerland, Bruno Duarte, CCO (at 5G World)*

SUPPORT RICH EXPERIENCES

“We are focused on what you can do with 5G and the experience, not on the number of sites.”- *CEO of OpCo of EU Operator*

“I see interesting opportunities with our content assets for VR and gaming and consumer services that really benefit with 5G” -*CEO of OpCo of EU Operator*



CSPs See Value Added Services, Device Pricing Key for Consumers

To drive consumer 5G adoption, service providers need to assess the **fundamental value of 5G** and **drivers of adoption** that will impact speed of migration to 5G. CSPs are skeptical that connectivity will push consumer revenue growth, but see opportunities in value added services enhanced by 5G.

VALUE OF 5G – Revenue uplift opportunity?

What is the fundamental value of 5G for consumers and can any value delta be calculated and positioned on a % uplift basis over 4G consumer services?

Tier 1 APAC

“We do not expect 5G could boost our performance in the consumer market. Currently our data revenue has started declining. If the launch of 5G could stop the declining, it would be good enough. We do not expect a significant growth in consumer market, even if 5G is launched.” -Tier 1 operator APAC, pricing strategy manager

Tier 1 APAC

“In consumer market, the **lower cost per GB** and **enhanced user experience** should be the fundamental value for consumers.” The interviewee seems optimistic about the value uplift brought by 5G. He predicts the service revenue in consumer market could be uplifted by 25% in 5 years. The **revenue from connectivity may be flat but the value added** services enabled by 5G such as HD video, VR/AR, gaming, etc. could push the growth. -Tier 1 operator APAC, senior manager 5G planning and service development

Tier 1 EMEA

“From a business and marketing perspective, **5G provides good enhancements** to customer experience and new bells and whistles beyond high speed and capacity.” - Tier 1 EMEA operator, VP Marketing

SPEED OF MIGRATION OF USER BASE TO 5G

How aggressive should operators be in terms of pricing models that attempt to drive users from 3 and 4G services, and what are the best approaches to stimulate upgrades ?

Tier 1 APAC

“We will not provide any aggressive tariff plans to stimulate the upgrade, we think the upgrade from 4G to 5G should be a natural process with the development of 5G network coverage and 5G device ecosystem. In the early days, we may even not offer 5G specific tariff plans. Any customer who has a 5G device could access the 5G network.” - Tier 1 operator APAC, pricing strategy manager

Tier 1 APAC

“The driving factor for consumers to adopt 5G must be a combination of device and service; the migration speed would depend on the availability of 5G devices, particularly timing of when device price points support 5G to enter the mass consumer market. -Tier 1 operator APAC, senior manager 5G planning and service development

Tier 1 EMEA

They would typically start by addressing customers who can buy 5G device itself: “These sorts of customers will be looking for abundant offers, maybe unlimited data and value added services in the bundle as well.” - Tier 1 EMEA operator, VP Marketing



Operators See Strong Value of 5G for Enterprises

What is the fundamental value of 5G for enterprises, and can any value delta be calculated and positioned on a % uplift basis over 4G services?

5G ADDS VALUE FOR ENTERPRISES

CSPs see opportunities to add value to enterprise customers with 5G, but caution that true impact will take time to evolve and requires co-development of solutions with customers.



“Our approach is to do co-development of solutions, working closely with enterprise customers to develop solutions, see where 5G adds value” - Tier One US operator: IoT, AVP Product Management



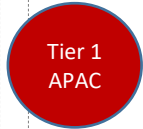
“Everybody is trying to find out what 5G can bring to the industries...the market still needs to be developed; decision-making on how much 5G will be in production or logistics is not yet set...it will be over many years that we will know how much impact 5G will have.”

- **Precise location** – to have precise information of where something is – to 1 meter accuracy in urban IoT, this creates more efficiencies for industry, ability to place things more accurately, spend less time searching for things “for industry, this is truly helpful”
- **Improved latency** – 4G was always around data throughput, not latency. 5G improves latency - stability of latency is a very important thing for industry to adopt use cases for certain things
- **Security** – see willingness to pay by industry to enhance effort beyond best effort if their whole production relies on it- Antje Williams, SVP 5G Campus Networks, Deutsche Telekom



Especially for enterprise , 5G will be a disruption from just connectivity –our vision is to be aB2B2X platform to serve all our customer uses cases with innovative digital services on top of the platform.”-Alexis Hostos, Telefonica B2B Head of Product Strategy

5G LOW LATENCY, SPEED, SECURITY



“5G indeed brings something different, such as **low latency**. 5G could help operators to increase revenue in enterprise market. But it is too early now to predict how much revenue could be increased. 5G is not fully mature yet to serve for enterprise market. There are few 5G modules in the market, Standalone architecture has not been deployed, even operator’s internal organization is not ready for an enterprise oriented market development, etc. We are planning to change our organization to strengthen the enterprise business. But it will take time.” - Tier 1 operator APAC, pricing strategy manager



“In enterprise market, the value of 5G would depend on the scenario. **High bandwidth in mobile scenario** may be 5G’s unique value. If 5G can provide comparable bandwidth with fixed broadband in mobile scenario, it will be a meaningful advantage for 5G. **Edge computing** also has unique value in enterprise market. We may provide enterprise customers some SaaS services based on edge computing platform. We have seen strong interest from enterprise customers in **private 5G network**. We are considering various approaches to meet enterprise demands, either through virtual network based on **network slicing**, or leasing base station and edge computing hardware or leasing spectrum.” - Tier 1 operator APAC, senior manager 5G planning and service development



“Enterprises will value latency and security – we need to address this benefit for enterprises; eg extreme security at the edge” -Alexis Hostos, Telefonica B2B Head of Product Strategy



5G Pricing Levers: “No One Size Fits All,” Many to Consider

Pricing Levers in 5G

What will be the main pricing mechanics for 5G services – will they be similar to existing 4G service pricing mechanics, or will new models emerge? Does 5G provide new opportunities for premium pricing or upsell? A range of potential pricing mechanics CSPs might consider include:

- Data volumes usage
- Bundled content or apps
- Time-based subscriptions
- Resource utilization
- On-demand access
- Latency based
- Speed tiers/boosts
- Wholesale
- Sponsorship based
- Sharing/gifting
- Loyalty based awards
- Group based discounts or rewards based on usage/activities
- Based on spectrum (eg mmwave massive bandwidth, or private 5G)

Strategy Analytics asked operators which types of pricing mechanics they consider will be most prevalent in 5G



Pricing Mechanics in 5G: Emerging Views

What models and pricing mechanics should operators be adopting to encourage uptake of 5G services and plans and how should operators be looking to innovate in pricing models for 5G to drive uptake and migration from 3 and 4G services?

5G Premium, No one-size-fits-all

There is a growing consensus that putting 5G in premium tiers is a good approach, but that a straight up extra fee for 5G is not a viable option – at least not for long:

- “To charge a premium for 5G requires a customer to judge how much time they are going spend in a 5G area” – this influenced decision **not** to charge a premium for 5G -*Max Taylor, Consumer Marketing, Vodafone UK*
- “**No one-size-fits-all** when it comes to 5G pricing strategies, each market is inherently different and there is no straightforward answer. We need to be pragmatic in approach but have **flexibility to take bolder steps down the line**” - *James Stoker - VP Consumer Marketing – Europe, Orange*

Speed

Some CSPs see Speed Tiers as strong option to monetize on QoS, others are skeptical:

- Vodafone UK was really positive about QoS and ability to offer that as a feature with new speed tiers.
- “in case of a price war...if our service plans are volume based, we can offer a larger volume and stimulate customers to upgrade to new plans. But if we are speed based, how can we offer higher data rate without the network upgrade?” The operator may develop a volume and speed combined plan to give customers more flexibility, while keeping their business sustainable -*Tier 1 operator APAC, pricing strategy manager*

Latency

CSPs have not yet moved to incorporate latency-based fees or tiers in their 5G pricing strategies, although they are studying the possibility:

- Vodafone UK made no suggestion they have figured out an appropriate model to charge for latency or slices, but did say that QoS was important in consumer gaming in particular. -*Vodafone UK executives at 5G launch event*



Pricing Mechanics in 5G: Emerging Views (Continued)

Service/App-Based

- A Tier 1 APAC operator indicated they are thinking to develop application centric service plan in 5G, such as VR centric or HD video centric plans in which a subscriber to the 5G service plan could enjoy xx hours VR content or HD video content, plus a normal data volume. For business customers, the service plan could be designed around international data roaming or cloud service. -Tier 1 operator APAC, senior manager 5G planning and service development
- “Our plans are differentiated based on the range and quality of content available,” with price tiering built around adding more services on the higher tiers (as well as the current volume-based tiers), e.g. free content for entry level customers and exclusive content for high end customers. – Korean operator VR/AR team

Operators see both Service/App based 5G plans and bundled pricing for multiple connected devices as important options. They also see a good fit with offering custom sized plans in 5G that give customers control and flexibility to switch plans or plan elements as desired.

Custom Plans

- Sees good fit with their custom plans [that give customers choice of amount of minutes/text/data] for bringing out 5G because “people only want to pay for what they want” -CEO of Opco of EU Operator
- Vodafone UK talked up the fact that consumers can switch between the 3 plans in their self-service app, with that taking effect the same day; they view that consumer control and flexibility as a key selling point in their 5G plans .- Max Taylor, Consumer Marketing, Vodafone UK

Device-centric Bundles

Consumer IoT – 4G today, 5G future

- V by Vodafone consumer IoT service currently charges per device rather than offers bundles . They see bundled pricing as a natural evolution for the products (e.g. you get a tracking bundle covering bags, kids, car or some combination of perhaps 5 SIMs for those) but recognize that this will require an upgrade to the billing software to easily support that. - V by Vodafone consumer IoT team



Unlimited 5G Data: Is it Essential, Inevitable, Monetizable?

CSPs expressed mixed views on unlimited data plans in 5G – a feature that has become common in multiple 4G markets and early 5G launches.

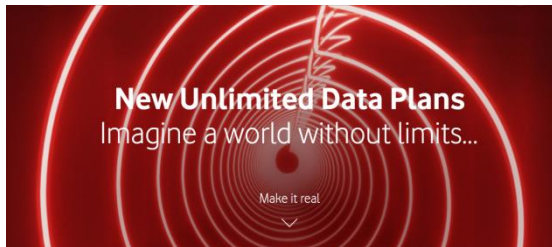
Unlimited is the Way to Go

Multiple markets with early commercial 5G launches have continued (from 4G) or introduced unlimited data as a part of the 5G value proposition, showing an increasing trend to move toward unlimited data in 5G.

Vodafone UK view their 5G offer as a “completely new market changing approach to how we price data” – the key for them is the combination of the unlimited data plans AND the fact there is no price premium for 5G.

“We want to create a mechanism to get as many people using 5G data as possible. **Unlimited is key to removing barriers to adoption.**”

-Nick Jeffrey, CEO, Vodafone UK



Unlimited May Happen – But How

How unlimited is your unlimited – and what levers within unlimited plans can drive monetization?

“**We are not convinced that unlimited is the answer for the needs of every customer**, although this is one way that the market can go especially with better throughput and increasing usage, and we have unlimited offers in mobile in some markets that can give customers worry free usage. That said, we have been successful with high end plans in 4G to date and delivering value added benefits and experience. With 5G, we need to be pragmatic and innovative in **exploring new offers across fixed and mobile** that can sustain some of these premium elements for the high end. This can use some **new levers, whether that’s speed, latency or something else** but need to be created based on **genuine, customer need driven** use cases without adding substantial costs.”

-James Stoker - VP Consumer Marketing – Europe, Orange



Digital Engagement Key in 5G

“Self-care apps will be more popular in the 5G era.”

-Tier 1 operator APAC, senior manager 5G planning and service development

Given the market timing, should operators now be pursuing a real-time pricing model controlled by the user via self-care apps and reducing reliance on retail stores and call centers?

CSPs see a greater role for real-time, self-care apps in the 5G era—in fact, they see digital engagement as essential in 5G.

- As noted by a Tier 1 APAC operator, self-care apps are a trend that is not directly related with 5G
- Another Tier 1 APAC operator commented that they still value offline channels for improving consumer engagement and loyalty and will continue to invest in offline even as they invest in online channels.



**Max Taylor,
Consumer Marketing,
Vodafone UK**

Vodafone UK sees consumer control and flexibility as a key selling point – talked up fact that consumers can switch between the 3 plans in their self-service app, with that taking effect the same day



Vodafone Head of Networks: “Our ultimate goal is a global service

Platform where anyone can come and self-serve. We want to create a completely programmable, open, self-service network that is flexible and efficient enough to cope with unanticipated market demand”



**James Stoker - VP
Consumer Marketing
Europe, Orange**

*“For operators this is going to be an essential capability: digital first and human support as and when needed”
“only natural that we would absolutely want to take advantage of that in 5G”*



Enterprise Services: A Growth Area for 5G

Enterprise Pricing Models Evolving

What models and pricing mechanics should operators be adopting to encourage uptake of 5G services?

CSPs see enterprise services as a significant area for disruption and enhancement, with 5G playing a key role in new business models.

- **In the enterprise market, the tariff model may evolve from a data volume centric model to a Network as a Service or Platform as a Service model.** There is strong demand for private 5G networks. We could leverage our diverse spectrum resources and network slicing capabilities to create new business opportunities. The business model could be transformed from selling data to selling network capabilities. - Tier 1 operator APAC, pricing strategy manager
- **We need a modular approach to integrate the enterprise services** that our customers want on top of the network connectivity, whether the services will be offered by DT, our partners—or someone else (not DT); big companies often have their own applications they want to use. -Antje Williams, SVP 5G Campus Networks, DT

Self-Care Growing in Importance

For enterprise and B2B2X models, how important is options for self-care portals?

As in the consumer space, CSPs see enterprise digital self care as a growing need both pre-5G and in 5G to provide users with more visibility and control for self-monitoring and self-managing services.

- We are working with the sales team to train and develop more abilities to do solutions sales and to offer more visibility and control to clients with portals. -Tier One US operator, IoT, AVP Product Management
- For more visibility on their SLAs, enterprise customers will be able to self-manage/monitor services through a “customer dashboard” that we can provide. -DT, Antje Williams, SVP 5G Campus Networks
- “The key challenge to enable enterprise 5G is our capability to show SLAs to our business customers. If we can do that, every Orange customer will be able to use efficiently this new connectivity for their business process. Already on 4G, we are pushing private mobile network offers like PMR. With the introduction of 5G, private extensions on public networks should rapidly become a must for a large variety of use cases ranging from industrial sites to real time media experience.” - Arnaud Vamparys, Senior VP Radio Networks and 5G champion, Orange



Campus Networks: An Early Target for Enterprise 5G

When considering enterprise and industry offerings, should pricing policy and strategy follow existing 4G based plans or fixed-line service policies? What opportunities exist for innovation in enterprise pricing approaches across fixed and mobile with 5G?

5G for Campus Networks

5G pricing models for our campus networks will be comparable to pricing models in industry Wi-Fi today. There are similarities and Wi-Fi will be partly both a competing and co-existing technology. Overall, the first 5G pricing models will be a continuation of the pricing approach for our existing 4G/LTE campus networks but with newer or enhanced 5G features impacting the price point.

There are 3 considerations for pricing for 5G campus networks:

- How reliable do they need the network?
- What use cases do they want to do— and therefore the features required?
- What will be the impact on the business cost basis?

The responses to these 3 questions will impact the design and architecture of the network and the SLA required or service reliability level.

- For example, if they need extreme reliability (as in fixed today), it will require twice the infrastructure to create redundancy.
- For use cases requiring very precise positioning as a feature, it will need more antennas to do the triangulation as well as compute capacity to constantly update positioning data.



Looking into the future, 5G Campus Network pricing models will evolve as it becomes possible to offer SLAs based on the more advanced and automated 5G capabilities to come beyond Release 15.

Campus networks have a much more turnkey model than enterprise services:

- Often there is a fixed payment and then additional fees for managed services.
- Pricing models will include a combination of private networks with existing enterprise services, e.g. IoT will come with it.
- There will be public network and private part. For example, they could do slicing for the public layers for fleet management, etc., while for security reasons the sensitive data stays in the private network.

-Antje Williams, SVP 5G Campus Networks, DT



Network Slicing Will Play a Role in 5G

How will operators integrate slicing into service pricing or will slicing be transparent to users and just deliver on desired value proposition (or multiple slices could be delivering on a service package)?

B2B Focus

CSPs see network slicing as a key feature for future enterprise services, both for service delivery and for monetization.

- Businesses will pay for slicing, consumers won't -CEO of Opco of EU Operator
- We see slicing as more of a topic for our B2B colleagues -Tier 1 Operator EU commercial team focused on consumers
- Network slicing customized for B2B vertical businesses opens door for new B2B services -Tier 1 Operator EU network team
- Network slicing will mainly focus on the enterprise market or special group of customers, such as game players. - Tier 1 operator APAC, pricing strategy manager

Slicing for Partnership Models

- If a partner agrees to share revenue with us, we would allow the partner to do self-configuration for the slice or split the slice into multiple sub-slices. We do not yet have a clear picture on the slicing service for enterprises, but we have decided to be flexible and open to partners in the market. We will be flexible in terms of network slicing monetization and will collaborate with partners to test all possible models. -Tier 1 operator APAC, senior manager 5G planning and service development
- We will definitely offer slice based tariff plans. It may be consumer oriented plans or some services based on B2B2C model. -Tier 1 operator APAC, pricing strategy manager

A Role in Private Networks

- For enterprises that need a data guarantee, they will be able to do this with network slicing over a public network, with changes being only software based. A private network is not required.
- However, today our customers are demanding data security, and they don't want their data to leave campus; with virtual slices in public networks, the data goes offsite. If data needs to stay onsite, they will need a private network; within that they can do slicing to serve different use cases, so slicing can be used as a tool on private networks as well. - Antje Williams, SVP 5G Campus Networks, DT



Partnerships Key in 5G

“Partners are a key pillar of 5G rollout...

Tomorrow will offer new use cases that are unimaginable today so what is needed is more co-innovation to make it happen.”

-James Stoker - VP Consumer Marketing Europe, Orange

How are you approaching new partnership based business models, and do you have systems in place to support easy partner onboarding, joint service creation and settlement, or are new solutions needed?

All CSPs interviewed recognized the importance of partnerships in developing 5G services, both for consumer and enterprise customers.

Tier 1 APAC

Tier 1 operator APAC, pricing strategy manager

In the consumer market, we are mainly working with video content providers, gaming service providers, etc. B2B2C models may be launched.

Tier 1 APAC

Tier 1 operator APAC, senior manager 5G planning & service

For the enterprise market, tariff models will be very flexible. We will work with partners to develop B2B2X models; we will focus on slicing operation, network automation, supporting the billing and revenue sharing of partners.



Alexis Hostos, Telefonica B2B Head of Product Strategy

We will be the aggregator of services with security and low latencies at edge: single billing with end-to-end management ...over all the services – IT and vertical focused. Will have lot of startups and innovative partners in our enterprise services.



Antje Williams, SVP 5G Campus Networks, DT

It is extremely important to build and orchestrate an ecosystem. We want to be able to offer E2E services, so we are working with different ecosystem players including infrastructure vendors and other solutions providers such as start-up companies who know the market already and want to connect their IoT devices with 4G or 5G.



CSPs Prepare to Grow Value as 5G Evolves

Some CSPs recognize that they need to be ready for 5G service and pricing flexibility as real world 5G capabilities evolve

- **5G will evolve in its real world capabilities over time, requiring new pricing approaches and increased partnerships.**
 - We will start with Non-standalone (NSA) 5G but see Standalone (SA) as real benefit and thus will go for it as soon as possible; we see service-based architecture (SBA) as the true differentiator of 5G. *-a leading European telco*
- **Prepare for slicing and increased partnerships: be flexible, agile, able to scale with demand and with partners.**
 - “We will be flexible in terms of network slicing monetization and will collaborate with partners to test all possible models.” *-a Tier 1 APAC operator*
- **Be ready to evolve pricing approaches in 5G as market demands require-- IT solutions are key.**
 - [From a charging perspective for 5G pricing], “it doesn’t matter what G it is, we have a very flexible charging system” (using MATRIXX) [that is ready to go] *- Rob Visser, Technology CIO, Wind Tre*
 - We will do 5G deployments on demand to start, but we are digitizing systems, analytics, blockchain, fiber ahead of 5G. *-José María Álvarez-Pallete López, Telefónica CEO*



Key Conclusions: Operator Perspectives on 5G Positioning & Pricing

5G Positioning

- While leading CSPs have websites that explain how 5G will improve lives, enterprises and societies, the reality is that early stage 5G services thus far mainly focus on more data faster.
- All 3 South Korean operators have focused on strong 5G content propositions and partnerships with content providers and application developers: the operators have all broadly built their propositions around AR/VR, UHD video, gaming and communications: “4G speeds are already high, which makes it hard to upgrade subscribers to 5G without services.”
- Apart from the Korean operators, thus far there has been a lack of services and activities that offer new, innovative immersive experiences that specifically are enhanced by 5G.
- CSPs are skeptical that connectivity will push consumer revenue growth, but see opportunities in value added services enhanced by 5G in particular for enterprise customers—cautioning that true impact will take time to evolve and requires co-development of solutions with customers.

5G Pricing

- Most early 5G launches are offering 4G and 5G on the same plans, with 5G only available in premium tiers or free in premium tiers but only available for a fee in lower tiers.
- There is a growing consensus that putting 5G in premium tiers is a good approach, but that a straight up extra fee for 5G is not a viable option – at least not for long.
- Some CSPs see Speed Tiers as strong option to monetize on QoS, others are skeptical; thus far, most CSPs have not yet moved to incorporate latency-based fees or tiers in their 5G pricing strategies, although they are studying the possibility.
- CSPs see enterprise services as a significant area for disruption and enhancement, with 5G playing a key role in new business models.
- CSPs see a greater role for real-time, self-care apps in the 5G era—in fact, they see digital engagement as essential in 5G.
- CSPs see network slicing as a key feature for future enterprise services, both for service delivery and for monetization.
- Operators recognize the importance of partnerships in developing 5G services, both for consumer and enterprise.



Driving toward 5G Success: Key Findings & Recommendations

Prepare for 5G Success: Think beyond launch

Be Customer Centric

- **Customer satisfaction with 4G mobile broadband is good** and thus customers must be convinced of value of upgrading to 5G.
- **Moving beyond early adopters** to the early and late majority with sustainable monetization offerings is critical to the success of 5G.



CSPs need to position 5G services to **solve customer pain points** and **“wow” customers** with new experiences/uses to attract them to 5G

Be Ready for 5G Pricing Flexibility

- **Early stage 5G services thus far mainly focus on more data faster**; there has been a lack of services and activities that offer new, innovative immersive experiences specifically enhanced by 5G



CSPs need to **be more imaginative** at launch AND give themselves the **flexibility to adapt quickly** to rapidly changing market conditions to address a wide range of customers, partners & competition

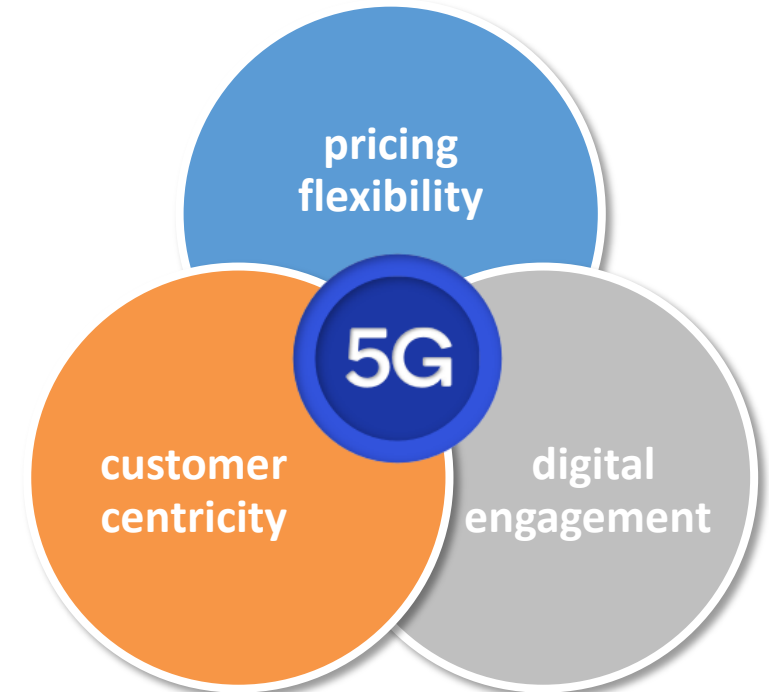
Use Digital Engagement

- 5G arrives as demand for real-time interactive engagement on mobile devices is increasing. CSPs see a greater role for **real-time, self-care apps** in the 5G era to address digitally savvy users, enterprise desire for more control & visibility, and save costs.



CSPs need to **expand digital engagement** in order to drive additional discovery, needs-based upsells among 5G users

5G Imperatives





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