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Experience-based enhanced mobile data opportunities

New 5G and 5G-A monetization strategies

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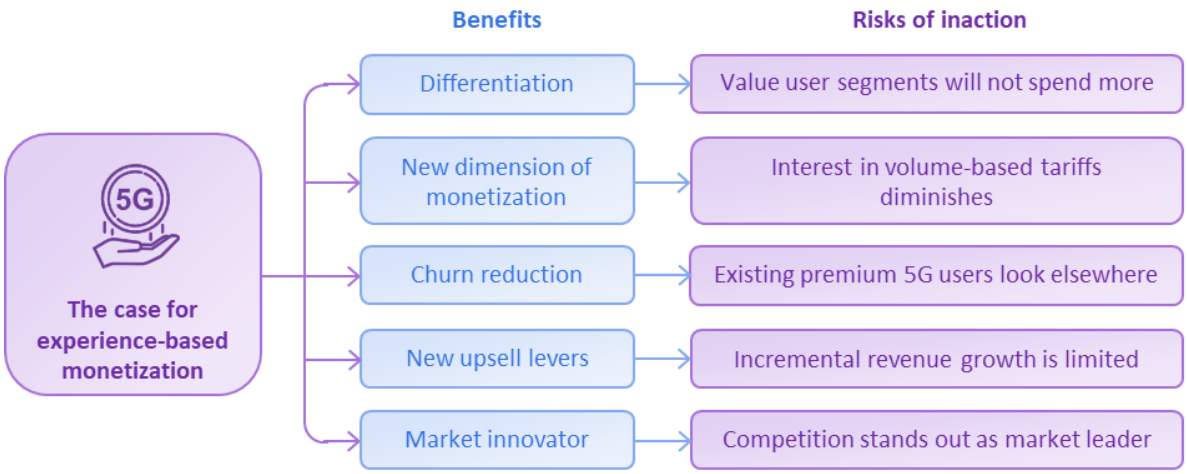
Contents

Summary

Differentiated, experience-based services are the key to monetizing mobile data

Leading global mobile operators are moving away from volume-based tariffs to selling experiences to customers, such as faster network speeds tailored for specific applications, occasions, and settings. In mature 5G markets, it is no longer enough to focus solely on upselling based on data volume because high-spending consumers typically already subscribe to plans with large or unlimited data inclusions. Therefore, operators are moving beyond pure traffic monetization to also providing intelligent services by productizing new network capabilities. The rationale for operators to provide experience-based data services includes creating new differentiation for upselling and reducing customer churn (**Figure 1**).

Figure 1: Why operators should embrace experience monetization



Source: Omdia

In short, operators must redefine the mobile experience by developing and promoting differentiated offers. This should include leveraging AI-powered user service level agreements (SLAs) based on faster speed and lower latency.

Experience monetization fundamentally involves customer segmentation. It enables differentiation among operators by creating specific and targeted VIP services that are priced at a premium. For

example, China Unicom Guangdong's VIP uplink plans for social media influencers are, on average, 20% more expensive than normal 5G plans.

Experience-based monetization has several commercial benefits. The creation of multiple tariff tiers could help arrest the declining price per megabyte. Enhanced experience tariffs are also an opportunity to draw out higher ARPU from customers and encourage incremental spending more widely through on-demand tariffs.

In mature markets, adding value through experience-based choices can reignite consumer interest in 5G, which facilitates two things—upselling the existing customer base and potentially attracting new users from competitors. Providing 5G customers with better experiences will help to increase usage and customer retention, which is critical in highly penetrated markets where operators are finding it challenging to maintain subscriber and revenue growth.

Experience monetization is also a reality in many markets. In emerging markets with low penetration, the rationale for experience monetization focuses more on smart segmentation to entice first-time customers onto the 5G network.

Ultimately, the risk of inaction is data commoditization. Users will eventually reach a point where they no longer require more data unless it serves a specific purpose. This is particularly relevant since extended reality (XR) apps, which are considered a potential driver for increased mobile data use, are still not widely available.

Furthermore, a new survey of consumers in the UAE revealed that there is strong interest in and willingness to pay for experience-based mobile services. This not only represents an opportunity for operators in the UAE, but it is also relevant to other advanced markets in the Arabian Gulf and beyond and can be used as a starting point for the development of tailored, experience-based mobile data monetization efforts around the world.

Experience-based mobile data monetization is a global reality

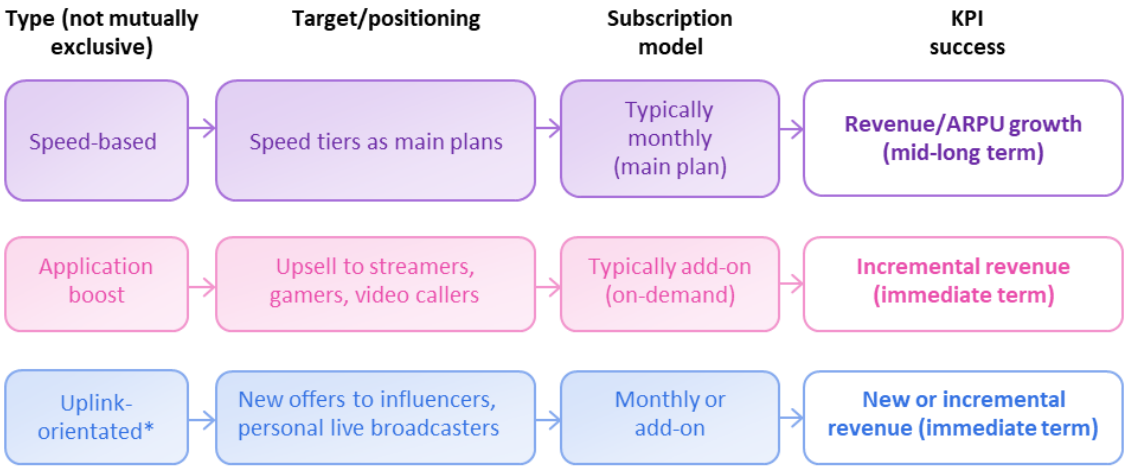
Experience monetization is driving 5G data usage, upsell, and revenue growth

Leading global operators are increasingly implementing experience-based monetization tariffs, which closely align with the results from our survey of mobile users in the UAE (see the next section of the paper). The road to experience monetization is an evolution. First, operators should embrace the opportunity to trial VIP tariffs, not only to gauge consumer interest but also to test the end-to-end customer journey process—from identifying a target segment to effectively marketing the service to the right user. Other key considerations include:

- Ensuring the enhanced networks are ready.
- Ensuring telco marketers—not just the chief technology officers (CTOs)—understand what the networks are capable of.
- Segmentation must be done with local market factors in mind.
- Direct marketing of the right service to the right user (which requires data analytics and AI-powered platforms).

As shown in **Figure 2**, current common experience-based tariffs include speed-based plans, application boosts (for gaming, streaming, video calls, and so on), and uplink-orientated tariffs.

Figure 2: Experience-based mobile monetization models



Notes: *Subset of speed-based and application boost singled out because it is unique to the normal downlink-based plans today

Source: Omdia

These are not mutually exclusive and will evolve over time as tariff innovation progresses. Another layer of tariff differentiation involves the subscription model. For example, tariffs required for short-duration location-based bursts (e.g., personal live streaming of a concert) are better suited to users who pay in the moment or on demand. This approach leads to immediate incremental revenue, as opposed to locking users to a monthly main plan (for example, an operator adding speed-tiers to its main plans, which is a mid- to long-term monetization strategy). Success stories of early case studies in experience monetization are detailed in the following sections.

AIS, Singtel, and China Mobile target streamers, gamers, and eventgoers with experience pricing

To generate incremental revenue, AIS in Thailand has launched an on-demand quality of service (QoS) app, the Living Network, consisting of both application and speed-based tariffs. The 5G Boost Mode (speed boost) targets users downloading files, watching movies, or surfing social media in crowded areas. It is the most popular of the three services, which also includes 5G Game Mode (which offers lower latency for 12 games) and 5G Live Mode (designed for personal live streaming).

Embracing an on-demand tariff strategy in the prepaid-dominant market, each boost mode has a duration of three hours, with usage capped at 5GB per session for THB 49 ($1.47), which accounts for 22% of AIS' ARPU. Customers can purchase up to 10 packs per day, combining any mode they choose.

In Singapore, Singtel has also implemented situational pricing, including its network slicing-based passes for video streamers and large event attendees. The Video Pass network slice promises “data priority on video apps”, so users “can enjoy the smoothest streams” for all their video entertainment. It costs S$8 ($6.20) a month with a six-month contract or S$10 a month without a contract, compared with Singtel’s ARPU of S$24. The Event Pass offers “data priority on all apps” for a S$5 one-time charge. The Event Pass was available for use at busy locations on Singapore National Day on August 9, Singapore’s F1, New Year’s Eve Countdown, and concerts—including Taylor Swift in March 2024.

For its part, China Mobile’s new 5G-Advanced (5G-A) tariffs leverage peak speed tiers of 2Gbps for gamers and live streamers and 3Gbps for business travelers. Currently, users on China Mobile’s main brand, Go Tone, can add unlimited streaming and gaming to their existing mobile plans for ¥20 ($3) a month, which is 39% of the firm’s ARPU. Additionally, the business travel package is available for an extra ¥30 monthly (or 59% of the firm’s ARPU). There are also standalone main plans that target these segmented users.

Mainland Chinese and Hong Kong S.A.R. telcos enable social media influencers with uplink enhancement

In Guangdong, China Unicom Guangdong offers three VIP uplink plans for social media influencers. These plans provide 90GB, 150GB, or 250GB of data for general use, along with 500 voice minutes per month. The first two QoS-based plans have a peak upload speed of 150Mbps, while the third plan offers 250Mbps a month. These uplink plans are available across 10 provinces, including Guangdong, and have attracted more than 500,000 users in total. China Unicom Guangdong reported that VIP uplink users have a 76% higher ARPU. It is delivering on its network guarantee: uplink speed is around 3x faster.

In Zhejiang, China Mobile reported having 200,000 VIP uplink customers, generating almost $100m in revenue over six months. China Mobile aims to commercialize a VIP downlink package that includes eight Migu digital media apps, including live sports streaming.

In Hong Kong S.A.R., 3HK offers 5G LIVE Connect with 120- or 240-day passes with a contract, targeting outdoor and indoor live broadcasters. Each pass allows the uplink of up to 500MB of data a day (which is generous) from YouTube, Facebook, Instagram, WeChat, or Zoom. For its part, HKT also offers 5G Upload+ as an add-on. Users can get 40GB for uplink traffic, but first, they must sign up for a 36-month 80GB 5G plan for general data use.

KPN sees an increase in revenue after adopting a speed tier strategy while new speed options emerge

Recently, speed tiers were introduced in various markets worldwide, including Australia, Canada, and China, as part of a new wave of speed and data upselling. In Australia, Telstra has implemented upsells between prepaid and postpaid plans with speed tiering. In the Netherlands, KPN unveiled a new speed tier strategy in 1Q24 that includes unlimited data, which is typical for speed-based tariff plans in Europe. In 1Q24, KPN reported that its postpaid ARPU grew by more than 5% year-on-year (YoY), with mobile service revenue increasing by 8%. The momentum continued in 2Q24, as the company reported a revenue growth of 7% and an ARPU growth of 2%.

Elsewhere, speed-based tariffs are about retaining premium customers. For example, in the UK, EE launched two new 5G postpaid premium plans with a Network Boost feature in August 2024, leveraging its 5G Standalone (5G SA) network speed. For no additional fee, premium customers subscribed to the new All Rounder or Full Works plans are entitled to Network Boost, which "prioritizes data coverage… in busy or crowded areas." The go-to-market messaging includes getting the company's "fastest speed" and a "VIP connection when the network is busy."

Meanwhile, one-off speed boosts are also becoming more widespread to grow revenue. In Finland, Elisa markets two speed add-on options, including 5G Turbo, which offers a peak speed of 600Mbps for use in Finland and the European Union (EU) and European Economic Area (EEA), with a data cap of 6GB and a validity period of three days.

Summary

New experience monetization tariff models are gaining traction owing to enhanced technologies, including 5G-A, QoS, and network slicing. Early indicators suggest that this is beneficial for mobile data monetization.

The appropriate type of experience monetization tariff is specific to the country, operator, and the type of application user. Implementing small, incremental VIP charges in an emerging market with low ARPU, low 5G penetration, and a large prepaid subscription base, such as Thailand, is a sensible approach. In China, where there is a large pool of social media influencers who depend on priority VIP plans, telcos can charge by the month. Similarly, in Hong Kong S.A.R., influencers are more likely to pay for VIP plans.

Conversely, Singtel's experience-based passes for events and video streaming are add-ons. Given the small size of the market, Singtel is cherry-picking and promoting passes for specific events (e.g., national holidays, concerts, and sports events).

Moreover, as with EE's Network Connection strategy, monetization can be linked to customer retention. For example, Telefónica in Spain and T-Mobile in Germany offer experience-based monetization to users on their loyalty programs. Customers of Telefónica's loyalty program can exchange tokens for VIP video calling, video streaming, and low-latency gaming. Meanwhile, T-

Mobile's 5G+ Gaming app, which uses network slicing, is free for six months, after which users are required to pay the games content provider €10 ($11) a month.

UAE survey reveals experience-based mobile data monetization opportunities

Some 80% of respondents are willing to pay more for an enhanced network experience

An online survey commissioned by Huawei and conducted in September 2024 among over 1,000 mobile users in the UAE revealed that this market is ready for new, experience-based mobile data offerings. The survey investigated the mobile application usage of respondents from various demographic profiles, covering their preferences and requirements for enhanced mobile data services, including their willingness to pay for improved application and network experiences through booster data plans.

Crucially, the survey revealed that, on average, 80% of respondents are willing to pay more for enhanced network experience, of which the majority are ready to spend an average of an extra AED 30 ($8.20) per month, equivalent to more than 40% of mobile ARPU in the UAE. Notably, video conference users, video streamers, gamers, and uploaders showed a particularly strong willingness to pay for better experiences.

Outside of homes and offices, large event venues, such as those hosting concerts and sporting events, are key locations where respondents are likely to purchase booster packages, which, as mentioned earlier, is a strategic focus of Singtel. Most respondents indicated that they are most likely to purchase a booster after having a poor experience with an application. This insight presents an opportunity for operators to use data analytics to push offerings to customers at a time when they are most interested in making a purchase.

A little more than half of respondents preferred short- to medium-term boosters for one day, seven days, or 30 days, demonstrating the wide range of potential package options that can be offered.

Interestingly, the survey found that low-income respondents are more willing to pay extra for certain improved network experiences compared with those in mid- to high-income jobs.

Network experiences do not match up with customer priorities

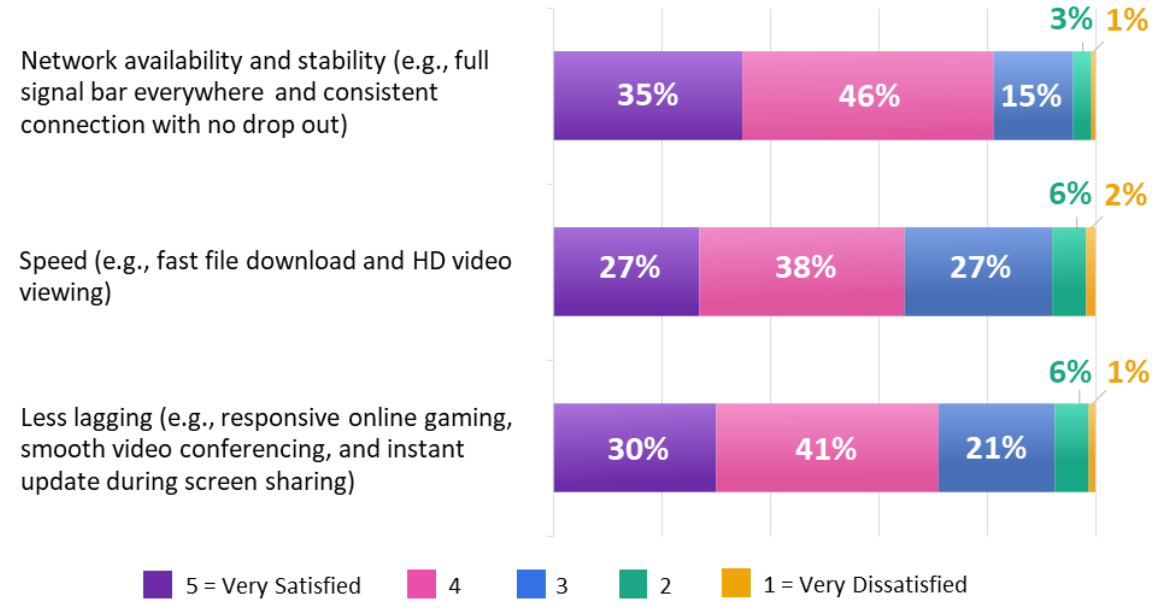
Although mobile users in the UAE have a good level of satisfaction with their networks, the survey showed that there is a mismatch between customer priorities and their network experience, which creates an opportunity for telecom operators to provide enhanced services.

Some 76% of respondents deemed faster download speeds to be the most important feature of their mobile data experience, reiterating the importance of speed-based monetization. However, when asked about their satisfaction with network speed, only 65% reported being satisfied (as indicated by a ranking of 4 or higher in **Figure 3**). This means that there is a mismatch between the importance of speed to customers and their actual satisfaction with the speeds provided.

For regular video streamers, the gap between satisfaction (speed) and importance (faster download speed) is even greater—64% and 87%.

The mismatch for those who regularly participate in video conferencing is 65% versus 77%.

Figure 3: Survey question, "How satisfied are you with your current mobile data experience?"



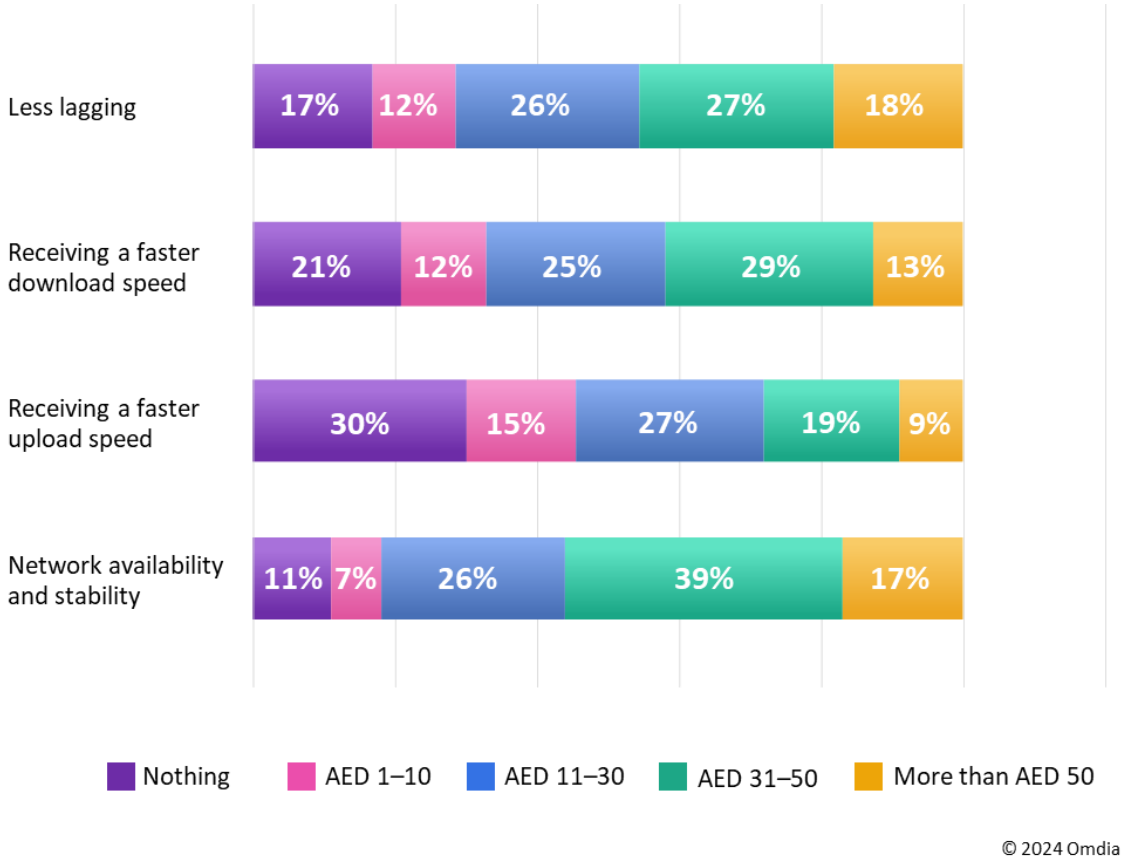
Source: Omdia

Many mobile users in the UAE are willing to pay extra, equivalent to 40% of ARPU, for better experience

Critically, the survey also revealed that mobile users in the UAE have a strong willingness to spend more to improve their network experience, with video conference users, video streamers, gamers, and uploaders indicating an especially robust willingness to spend more on enhanced mobile network experiences. This trend aligns with the practices of global market leaders operating in these areas.

On average, 80% of respondents are willing to pay more for a better network experience. Most of these individuals are prepared to spend an average of an additional AED 30 ($8.20) per month for a better experience (**Figure 4**). This amount represents over 40% of the UAE's monthly mobile ARPU of $19 in 2Q24. This indicates a genuine opportunity for revenue growth.

Figure 4: Survey question, "How much extra would you be willing to pay on top of your monthly mobile bill to include the following features?"



Source: Omdia

Mobile users are most willing to pay more for smoother video conferencing and higher-quality video streaming services

The survey also revealed a clear willingness among respondents to spend more for improvements to applications and services (**Figure 5**). Specifically, 81% of respondents expressed their willingness to pay more for smoother video conferencing, which is a feature that T-Mobile Germany is planning to offer as a VIP service, according to media reports.

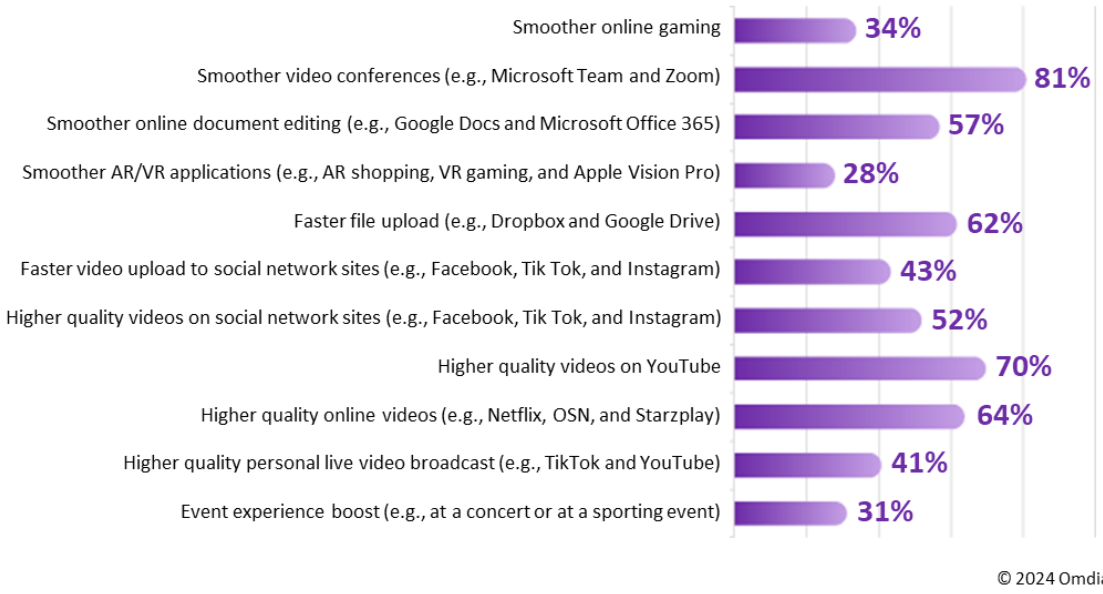
Additionally, 70% of respondents said they would pay more for higher-quality videos on YouTube, and 64% would pay more for higher-quality videos from services, such as Netflix and Starzplay.

Further, 62% of respondents are willing to pay more for faster file uploads, such as to Dropbox or Google Drive.

The strong willingness to pay more for video conferencing and video streaming suggests a potential mass market for experience booster plans for these applications. In contrast, booster plans for applications such as gaming and live broadcasting will likely appeal to specific market segments.

Only 3% of respondents indicated they would not pay more for any service improvements.

Figure 5: Survey question, "What enhanced experience would you be willing to pay more for on your mobile service?"



Source: Omdia

Regular users of an application are most willing to pay more for an improved experience with the application

The survey revealed that regular application users are especially willing to pay extra for a better experience with that application. For instance, regular video conference users showed an even greater tendency to pay extra compared to the overall respondents, with 94% indicating they would spend more for better video conferencing (**Figure 6**).

Similarly, some 88% of respondents who regularly watch YouTube videos are willing to pay more for higher quality videos on the platform, up from 70% of respondents in general.

Among gamers, 79% are willing to pay more for a "smoother online gaming" experience, while 87% of influencers are open to paying extra for higher-quality live video broadcasts.

Figure 6: Specialists' and overall respondents' willingness to pay more for better experience on mobile

Source: Omdia

Conference Boosters emerge as a top preference

In application-specific booster plans, the strongest interest is for the Conference Booster Plan, selected by 31% of respondents as their preferred booster (when given the choice of only one booster plan), which increased to 34% among regular video conference users. Given that about 90% of the UAE's population consists of expatriates and that voice and video calls through online apps (e.g., WhatsApp, FaceTime, and WeChat) are restricted in the UAE, it is likely that respondents are categorizing their use of Zoom and similar applications primarily for contacting family in their home countries as conferencing, in addition to utilizing these services for business purposes.

The Video Streaming Booster Plan is the second-ranked option, chosen by 22% of respondents, owing to the large number who regularly watch videos on YouTube, social network sites, and other online video platforms.

Although cloud gaming is a niche market, there is a strong demand for performance boosters among gamers. This is why T-Mobile Germany has launched a new gaming package. The UAE survey revealed that regular gamers are more interested in an Online Gaming Booster Plan (22%) compared with respondents as a whole, while 15% of regular influencers would consider a Live Broadcast

Booster. Different types of experience boosters appeal to specific application user groups, suggesting an opportunity to create differentiated offers.

Some 48% of respondents said they would rather have an experience-based service, such as a speed boost, included in their regular mobile plan, while 51% said they would prefer it to be an on-demand add-on that could be used for a duration of 30 days, seven days, or one day.

Gamers have distinctive preferences

Gamers have distinctive preferences that operators should consider when developing services for this market segment. For example, 62% of prospective buyers of the Gaming Booster Plan (compared with 45% of buyers of other boosters) prefer to purchase the booster as part of their regular mobile subscription rather than as an add-on.

Additionally, 30% of Gaming Booster Plan buyers (compared with 13% of buyers of other boosters) prefer to buy the plan before starting the application. Furthermore, 80% of Gaming Booster Plan buyers (compared with 52% of buyers of other boosters) prefer to make their purchase from home.

Event venues are key to short-term experience monetization

Although over two-thirds of respondents said they are most likely to purchase an experience boost at home or at their workplace or office, the key to maximizing experience monetization is to unlock purchase opportunities beyond the customer's main routine.

Excluding home and workplace options, large event venues are the most popular location at which respondents are likely to purchase an experience boost, with 29% of votes outside the home and work. This indicates that there are likely to be experience monetization opportunities around concerts, sporting events, conferences, and exhibitions. The next most popular locations are restaurants and hotels, with 19% of votes, followed by transport hubs, with 13%.

Mobile users are most likely to buy boosts after having a poor app experience

Most respondents (57%) stated that they are most likely to purchase a booster "after using an application with poor experience," while 25% are most likely to purchase a booster the moment their experience is poor.

This reveals an opportunity for operators to use AI-powered, near-real-time data analytics tools to target mobile users who have had or are having poor network experiences, particularly in busy areas.

Additionally, telcos should focus on customer segments that are likely to be particularly sensitive to network performance issues in these circumstances. This includes social media influencers who are uploading or streaming videos at busy locations, gamers experiencing lag, and executives conducting video conferences.

Low-income workers are the most willing to pay for some network enhancements

Notably, the survey revealed that respondents in low-income skilled and unskilled jobs are more willing to pay extra for some improved network experiences compared with those in mid- to high-income occupations, including white-collar workers, professionals and middle management, business owners, and senior management.

Specifically, 74% of low-income workers expressed a willingness to pay more for faster upload speeds, while only 67% of individuals in mid- to high-income roles felt the same way. Among low-income workers who are willing to spend more, 22% indicated that they would pay an additional AED 50 or more per month for faster download speeds, compared with just 14% of those in mid- to high-income groups.

In terms of mobile application usage by job type, the survey found that watching videos is common across all job types. However, professionals and middle management are more likely to engage in video conferencing and document editing on their mobile devices compared with the general population. Additionally, white-collar workers have higher rates of uploading videos to social networks and streaming personal live broadcasts than the overall group of respondents. This further indicates the potential for creating tailored services for different market segments.

Summary

The survey found that most mobile users in the UAE are willing to spend more on a better network experience and improvements to applications and services.

Additionally, the survey also revealed that there are opportunities in the UAE mobile market for precision marketing of differentiated, experience-based services to users of specific applications, as well as based on factors such as location, occasion and socio-demographic profile.

Moreover, the findings of the survey may also be applicable to other markets in the Arabian Gulf that share similar characteristics with the UAE, as well as more widely around the world. These insights can serve as a tool for developing strategies for experience-based mobile data monetization.

Recommendations for telcos and regulators

Act now, as key monetization factors have aligned. Consumer willingness to pay, evidenced by survey results, early commercial successes, and the readiness of the technology, means that operators can finally pursue differentiation monetization strategies. Operators should leverage the capabilities of 5G and 5G-A to create new experience-enhancing mobile data services. Operators who do not act could risk losing premium customers to their competitors, missing out on incremental revenue, and failing to grow the ARPU across different consumer segments.

Think beyond gigabyte-based data allowances. Demand and monetization potential exists for experience-based tariffs. Survey results show there is a pent-up demand from consumers to pay more for a valuable experience that is relevant to them. In the case of the UAE, that upsell equates to 43% of ARPU. While individual services might be niche – such as those targeting large events and gamers – there is strong demand if the right subscriber is targeted.

Prepare your technical and marketing enablers. Targeted offers are now viable, thanks to 5G-A, QoS, network slicing, and network data analytics function (NWDAF) in the core network, which analyzes data. However, mobile data experience monetization is more than the technology layer. Best practice experience case studies also leverage network analytics and near real-time precision marketing. Targeting high-demand in-experience niches at the right time with the right and localized offer is an incremental revenue opportunity, but it requires comprehensive innovation across the entire customer journey, from network capabilities to personalized service delivery.

Define a product roadmap. Tier 1 and 2 operators should develop a strategy to include or migrate to experience-based mobile data services. They can begin either by adding experience-based booster plans or by introducing speed-based plans that complement their current product offerings. Initially, operators should promote these new plans with below-the-line offers to their current customer base before moving to above-the-line campaigns. Additionally, operators should experiment to identify the optimal mix of market segments, experiences, moments, and subscription models.

Differentiation must be viewed in many ways. Different experience enhancements, such as download and upload speeds and latency, appeal to different application user groups, as well as customer occupation and location. This indicates opportunities for tailored offers and precision marketing. For example, in the UAE survey, gamers and personal live broadcasters showed the highest interest in purchasing the Gaming and Live Broadcast boosters, respectively. The challenge lies in making experience-based tariffs penetrate across the mass market. To achieve growth in ARPU, it is essential to offer a range of offers tailored to different application types.

Regulators must be proactive. Some operators are hesitant to adopt experience-based tariffs due to uncertainty regarding the regulation of this type of offering. Among regulators with a supportive approach, the UK's Ofcom has determined that premium packages—offering features such as low

latency and specialized services that deliver specific content and applications in an optimized manner—are permissible under net neutrality rules. As technology continues to evolve, it is crucial for regulators to develop policies to support consumer choice and service and network innovation, investment, and growth.

Appendix

Methodology

This report is based on the results of an online survey of over 1,000 mobile users in the UAE, conducted on behalf of Huawei, as well as on Omdia's global telecom market data and research into mobile data monetization worldwide.

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