



Fixed Wireless Access (FWA) has emerged as a vital component of the 5G ecosystem, recognized globally for its potential to revolutionize internet connectivity. A large percentage of the world's telecommunications operators operating 4G or 5G networks have launched FWA services, underscoring its importance in the digitalization landscape. The rapid adoption of FWA highlights its critical role in providing high-speed, reliable internet access, particularly in areas where traditional broadband infrastructure is lacking or is inadequate to meet the requirements for sustainable digital development and digital inclusion.

Growth and Penetration in the GCC Region

The growth trajectory of FWA is nothing short of impressive, with a projected compound annual growth rate (CAGR) of 23%. This robust growth is indicative of the increasing demand for high-speed internet services that FWA can provide. The Gulf countries are at the forefront of FWA development, boasting an average penetration rate that surpasses 21%. In countries such as the UAE and KSA, FWA has become an essential part of the digital visions, with active play in smart city projects, an emerging and thriving IoT ecosystem (IoT), and evolving home-broadband connectivity needs. Additionally, there is also strong governmental support and funding for 5G and digital transformation projects, which help support the strong case for FWA deployments.

The high penetration rates in the Gulf countries underscore the potential for FWA to bridge the digital divide. In areas where fiber-optic infrastructure is either too costly or impractical to deploy, FWA provides a viable solution for delivering reliable internet services. This capability is particularly crucial in rural and underserved areas, where traditional broadband infrastructure is often insufficient. By offering a cost-effective and efficient means of connectivity, FWA is playing a pivotal role in expanding internet access and promoting digital inclusion.

FWA Pro, FWA Biz, and FWA Lite

To cater to the diverse needs of users, FWA services are being tailored into specific offerings such as *FWA Pro*, *FWA Biz*, and *FWA Lite*. Each of these services is designed to address different segments of the market, providing tailored solutions that meet varying demands and use cases.

- **FWA Pro** delivers a high-value user experience with guaranteed speeds of 300 Mbps. This offering is designed to enhance user satisfaction by providing consistent, high-speed internet access. The guaranteed speed ensures that users can enjoy seamless connectivity, whether for streaming, gaming, or other bandwidth-intensive activities.
- **FWA Biz** focuses on providing robust connectivity solutions for businesses. In the Middle East, the demand for reliable business connectivity has led to a 37% increase in 5G private lines. FWA Biz is tailored to meet the needs of businesses, offering reliable and high-speed internet that supports their operational requirements. This service is particularly valuable for businesses in regions where traditional broadband infrastructure may not be sufficient.
- **FWA Lite** is designed for markets with lower average revenue per user (ARPU). This offering aims to provide affordable connectivity solutions to users in cost-sensitive markets. In the Gulf Cooperation Council (GCC) and Central Asia, FWA Lite has successfully connected or upgraded over 400,000 users within six months. This rapid adoption highlights the effectiveness of FWA Lite in expanding access to high-speed internet in regions where affordability is a key concern.

Survey Insights and Opportunities

A recent survey provided valuable insights into the user experience and market opportunities for FWA. The survey revealed that over 50% of FWA users in the GCC experience frequent connectivity issues. Despite these challenges, there is a significant willingness among users to invest in better services. Approximately 67% of respondents indicated that they would be willing to pay more for an improved experience.

These findings highlight substantial opportunities for operators to enhance user experiences and monetize these improvements. By addressing connectivity issues and investing in service quality, operators can tap into a market

- The projected compound annual growth rate for FWA is estimated at 23%.
- Gulf countries are leading in FWA development, with an average penetration rate surpassing 21%, particularly in regions with lower fiber penetration.
- A survey by Ericsson ConsumerLab shows that 80% households in KSA with 5G Fixed Wireless Access (FWA) prefer it as a full replacement for previously used connectivity.
- Households in KSA using FWA demonstrate that it outperforms wired solutions in flexibility, customization and ease of installation.
- A recent survey highlighted that over 50% of GCC FWA users experience frequent issues, but 67% are willing to pay more for a better experience.
- There are significant opportunities for improving user experience and monetizing these improvements.

that is willing to pay a premium for better performance. Enhancing the user experience is not only crucial for customer satisfaction but also represents a viable strategy for revenue growth. Operators can differentiate their services by offering higher quality and more reliable connectivity, thereby attracting and retaining customers willing to invest in superior service.

Expansion and Cost Trends

The potential for FWA Biz is expanding across various scenarios, transforming the traditional private line market. This growth is driven by the increasing demand for reliable business connectivity solutions that FWA can provide. As businesses continue to rely on high-speed internet for their operations, the demand for robust and reliable connectivity will only increase. One of the key factors driving the adoption of FWA is the decreasing cost of 5G terminals. The average price of 5G terminals is expected to drop to around \$80 next year, making the technology more accessible to a broader audience. This price reduction is crucial for promoting wider adoption of FWA, particularly in emerging markets where affordability is a key concern. By lowering the cost of entry, more users can access high-speed internet services, further driving the growth of FWA.

Collaborative Strategies for FWA Development

Successful FWA development hinges on the synergy between network infrastructure, terminal technology, go-to-market strategies, and pricing models. A holistic approach that integrates these elements is essential for maximizing the potential of FWA.

Key strategies proposed for enhancing FWA development include:

- **Migrating VIP users to higher-speed plans:** This strategy involves offering premium services to high-value customers, ensuring they receive superior connectivity and service quality.
- **Promoting Red Cap CCTV and glasses-free 3D technologies:** These innovative technologies can enhance the value proposition of FWA services, providing users with advanced features that leverage the high-speed capabilities of 5G.
- **Reducing terminal prices:** Making 5G terminals more affordable is crucial for driving adoption. By lowering the cost of entry, more users can access FWA services, promoting wider deployment and usage.

These strategies aim to enhance the value proposition of FWA services, ensuring they meet the evolving needs of users and drive greater adoption. By focusing on innovation, affordability, and superior service quality, operators can maximize the potential of FWA.

New FWA Industry Initiatives & Market Opportunities

The launch of FWA Square Solution, which was first announced during the SAMENA Council Leaders' Summit 2023, marked a significant milestone in the advancement of FWA adoption and evolution, especially in the contexts of digital-service innovation and 5G investment monetization; an imperative that has become even more critical in 2024. FWA Square is a collaborative initiative involving operators and ecosystem partners aimed at driving innovation and enhancing the

capabilities of FWA. This platform seeks to accelerate the deployment of FWA, ensuring that it can meet the growing demand for high-speed internet services. By fostering collaboration and innovation, FWA Square is poised to play a key role in the continued evolution of FWA technology.

FWA Square is also actively carving out new market opportunities, ensuring that FWA remains at the forefront of 5G monetization strategies. This platform is dedicated to exploring and developing new use cases for FWA, ensuring that it continues to evolve and meet the changing demands of the market. By focusing on innovation and collaboration, FWA Square is poised to drive the continued growth and success of FWA.

Similar to the FWA Square, the ELITE FWA Club, supported by SAMENA Council, serves as a platform for sharing experiences and insights, fostering collaboration among stakeholders to drive 5G towards greater success. This initiative aims to facilitate the exchange of knowledge and best practices, accelerating the development and deployment of FWA technologies. By bringing together operators, ecosystem partners, and other stakeholders, the ELITE FWA Club promotes a collaborative approach to solving challenges and driving innovation.

Conclusion

FWA is a pivotal 5G service that offers significant growth potential and opportunities for monetization. Through strategic collaborations, technological advancements, and tailored service offerings, FWA is poised to play a crucial role in the global expansion of 5G. By addressing connectivity challenges, lowering costs, and enhancing service quality, operators can maximize the potential of FWA, ensuring it meets the evolving needs of users and drives greater adoption. As FWA continues to evolve, it will play an increasingly important role in bridging the digital divide and providing high-speed internet access to underserved regions. Operators can capitalize on the opportunities presented by FWA, driving growth and delivering value to users worldwide.

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