

Most operators will use Wi-Fi to protect their revenue from challenger providers

September 2023

Oliver Bruff

Operators know that consumers’ home Wi-Fi networks are a bottleneck to improved customer experience, but the investments required to overcome this issue need to be supported by a business case that leads to improved margins.

As [operators become increasingly focused on home Wi-Fi](#), most will offer premium Wi-Fi services at no upfront cost to secure their revenue streams against price competition from challenger providers. However, operators that face less risk of customers churning to cheaper providers will instead aim to raise ARPU by charging for premium Wi-Fi hardware. A minority of providers will focus on reducing operating expenditures associated with customer support by improving customer experience.

These three strategies are outlined in Figure 1 alongside examples of operators that were interviewed in May 2023, as part of [Analysys Mason’s connected home case studies report](#).

Figure 1: Three business strategies for Wi-Fi

Business strategies	Proposition	Operator examples from our case studies report
Differentiation	Integrating Wi-Fi hardware with their fixed broadband tariffs to avoid price-based competition.	Fastweb Telefónica
Direct revenue growth	Raising ARPU by charging more for advanced Wi-Fi hardware.	Deutsche Telekom
Cost reduction	Improving Wi-Fi customer experience to reduce costs associated with customer service enquiries.	Telenor (Sweden)

Source: Analysys Mason

Bundling Wi-Fi into broadband tariffs for no extra charge is best suited for countries with high fibre penetration

Operators offer premium Wi-Fi services in their tariffs by default to justify higher prices in countries with competitive markets. This can help operators to avoid price-based competition and prevent customers from churning to cheaper providers.

This strategy is particularly effective in countries where a large share of customers has access to gigabit-capable broadband speeds, causing Wi-Fi to be a greater bottleneck for customer experience. Indeed, [regression analysis using data from our consumer survey](#) shows that bundling Wi-Fi mesh access points with fixed broadband has a larger impact on customer satisfaction in countries where gigabit-capable speeds are more common.

The two operators that follow this strategy in our [case studies report](#) operate in countries with competitive fixed broadband markets and high penetration of fibre to the premises (FTTP) connections.

- Telefónica offers its premium ‘Smart WiFi’ router, for no additional cost, to all its FTTP customers in every country that it operates in. FTTP roll-outs are advanced in Spain and in Latin America.
- Fastweb includes its Wi-Fi 6 NeXXt router in its two premium tariffs to justify its relatively high prices. Price competition is high in Italy because operators can purchase wholesale access from infrastructure providers Open Fiber and FiberCop and do not tier their tariffs by broadband speed.

We expect most operators to follow this strategy as fibre roll-outs increase competition in fixed broadband markets worldwide.

Operators can charge directly for Wi-Fi services in countries where fibre penetration is low

The second strategy open to operators is to charge additional fees for premium Wi-Fi. This may be preferable to differentiating connectivity services with Wi-Fi, which is a defensive strategy that does not provide many opportunities for further revenue growth.

For example, Deutsche Telekom tiers its routers according to the features that are included in each device; routers with more advanced features have higher monthly rental fees. It also offers fixed bundles of Wi-Fi routers and mesh access points that can be purchased alongside its fixed broadband packages. This enables Deutsche Telekom to raise ARPU when it adds new services to its Wi-Fi customer premises equipment (CPE).

However, Deutsche Telekom is better placed than most operators to follow this strategy, because it has the largest FTTP network out of all German operators. In 2022, over half of the premises passed with FTTP in Germany were passed by Deutsche Telekom’s network and there is little overbuild. There is less risk that Deutsche Telekom’s customers will churn to other providers, as it is the only FTTP provider in many locations. Operators in countries with greater overbuild and where a higher proportion of premises have FTTP will be more likely to follow a differentiation strategy to reduce churn, like Telefónica and Fastweb.

Improved Wi-Fi can reduce costs, but household geometry and changing Wi-Fi standards will keep costs high for most operators

Finally, some operators have developed their Wi-Fi strategies with cost-reduction as the primary goal. Operators can reduce the number of subscribers that call their customer support centres for assistance with their Wi-Fi by providing self-help functions through their Wi-Fi CPE and apps.

This is the main focus of Telenor's (Sweden) Wi-Fi strategy. Telenor limits the operating costs associated with home Wi-Fi hardware to further reduce its operating expenditure. It has one premium router model and aims to limit the number of mesh access points that it ships, in order to limit the number of devices it has to manage. Its use of an 8x8 router (a router with 8 receivers and 8 transmitters) means that it can achieve whole-home Wi-Fi coverage without providing additional access points.

This strategy works well in Sweden, where household geometry favours Wi-Fi solutions that only use one router. However, operators in countries where subscribers live in large, multi-story homes will struggle to provide whole-home coverage to consumers without additional access points, which will increase costs.

Moreover, operators that plan to upgrade to Wi-Fi 7 may also struggle to replicate Telenor's strategy. Wi-Fi 7 standards are designed to be optimised when combined with mesh hardware and few vendors plan to offer 8x8 routers that are compatible with Wi-Fi 7. This means operators may have to ship multiple devices to provide all the benefits of Wi-Fi 7, which limits their ability to keep costs low by only shipping one device, like Telenor does.

As a result, few operators will follow this strategy. Instead, most will leverage Wi-Fi to support their revenue, either as part of a defensive strategy, by offering Wi-Fi free of charge, or by charging customers for premium CPE.