

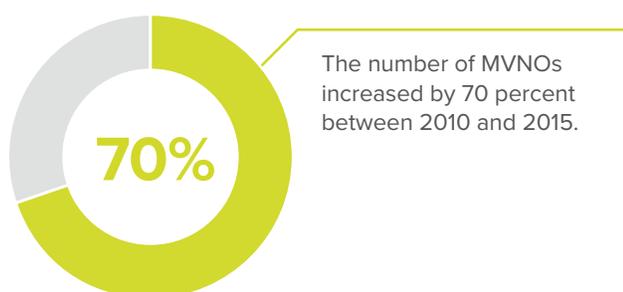
A Wi-Fi-first Strategy for MVNO Revenue Growth

How to improve margins despite
rising data usage

There is no arguing with the recent success of the Mobile Virtual Network Operator (MVNO) model. From the appearance of voice-only MVNOs in the early 2000s, the idea of providing wireless communications services over third-party infrastructure has taken off to the point that now there are more than 1,000 players in this ever-expanding space.¹

For context, the number of MVNOs increased by 70 percent between 2010 and 2015, buoyed by a customer acquisition rate more than four times greater than that for traditional mobile operators. This period followed an earlier wave of MVNO growth in the latter half of the 2000s, during which MVNOs began offering niche services, such as low-cost foreign calls, and servicing niche markets. In contrast, we are now witnessing a new generation of significantly larger players with realistic ambitions to garner more than 5 percent market share.

In mature markets, MVNO business is already commanding as much as 10 to 15 percent of the mobile subscriber base. And globally, MVNO revenues are set to top \$89 billion by 2022², with revenues in mature markets coming mainly from data and value-added services. All of these statistics suggest a rosy outlook for the MVNO model. But new challenges are emerging.



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A victim of its own success

As MVNO market penetration has increased, so too has the ease with which new entrants move into the mobile space. For instance, in recent years, we have even seen the emergence of Mobile Virtual Network Enablers (MVNEs), focused on the provision of infrastructure to MVNO operations. MVNEs sit between host Mobile Network Operators (MNOs) and MVNO ventures, supporting everything from the delivery of value-added services to the provision of back-office processes.

MVNEs not only make it easy for MVNOs to get off the ground by providing basic infrastructure and services, but significantly, MVNEs also reduce the cost of market entry by aggregating the demand from MVNO clients to negotiate better terms and conditions with host MNOs. The MVNE is often able to pass some of these benefits on to

MVNO customers. Undoubtedly, the ease in which MVNEs can help MVNOs get started, while easing an MVNO's cost burden, has contributed, and will continue to contribute, to the growth of the MVNO model.

Nevertheless, there is only so much market share to go around. MVNOs have historically performed best in saturated or near-saturated markets, where they can challenge established brands with differentiated offerings. But these are the very markets where it is the most difficult for individual MVNOs to stand out.

As the telecommunications analyst firm Strand Consult notes: “When the entry barriers are lowered, it influences the possible sales price of mobile providers without their own networks in a downwards direction.”³

Increasing competition comes from everywhere

It is not just other MVNOs that are spoiling the pitch for existing MVNOs and MVNO hopefuls. In many markets, MNOs are becoming more aggressive in their attempts to capture and retain customers, for example, by locking consumers into quadruple-play packages. MNOs are also seeing a significant shift in traffic, from voice to data, which is taxing already strained mobile networks. This shift will potentially lessen an MNO's desire to support MVNOs, particularly if the latter competes for the same customer base.

And in the U.S., cable TV operators are beginning to offer mobile services alongside their current TV and Internet offerings. Analysts have said that these operators could “become serious contenders in the wireless space.”⁴

Rising mobile data use

Moreover, we have witnessed unprecedented growth in mobile data traffic over the last year. According to Cisco's Visual Networking Index, mobile traffic reached 7.2 exabytes per month at the end of 2016, having grown 63 percent over the course of the year.⁵ Consumers have shown a voracious appetite for data and demand that they receive faster network speeds and unlimited data plans at cheaper prices.

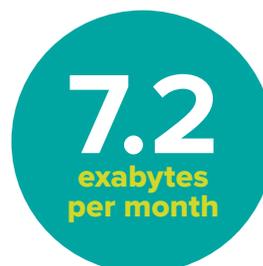
Against this backdrop, it is becoming increasingly difficult for MVNOs to maintain profitable margins and ARPU. Some industry sources believe that no more than 35 percent of MVNOs will remain profitable in the long term.⁶ To maintain and even improve margins, iPass recommends that MVNOs should follow a three-pronged strategy:⁷

- **Broadening the addressable market.** MVNOs need to focus on expanding into adjacent service markets and new market sub-segments. MVNOs can no longer afford to focus solely on low-end, low average revenue per user (ARPU) customers. MVNOs should consider offering more customized services to a greater variety of niche sub-segments, including the under-served enterprise segment, where there is clear demand for integrated business mobility.
- **Establishing deep partnerships with MNOs.** Often, when they are not creating or buying new sub-brands,

The benefits of a Wi-Fi-first approach

Indeed, there may be. The MVNO model is based on exploiting mobile networks, but pricey mobile networks are not the only options for connectivity. What is more, even though mobile networks are being continuously upgraded, in many places, Wi-Fi now offers superior connectivity and performance. And most importantly, Wi-Fi is not a space that is being crowded out by competitor MNOs and MVNOs, at least not yet.

Making Wi-Fi connections the first choice for customer connectivity can help an MVNO maintain profitability, by



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MNOs are seeking MVNOs out as partners to reach niche segments that the MNO may find difficult to reach on its own. An MNO's successful MVNO strategy often depends on facilitating a deep partnership, not just selling excess capacity. MVNOs should take advantage of these forward-thinking MNOs.

- **Expanding value propositions.** MVNOs must constantly add innovative products and service bundles to their offerings. Today's subscriber is not only looking for a winning price; they are also looking for a winning service bundle to satisfy most of their mobility needs. By expanding services and devices offered, MVNOs can win over a broader, general consumer market.

Many MVNOs will already understand the need to pursue such objectives in their business strategy. The question then becomes: is there a technological strategy that can help?

helping to accomplish each of the three strategies cited above:

- **Broadening the addressable market.** Complementing traditional mobile network services with strong Wi-Fi connectivity can enhance in-building performance and allow MVNOs to better serve important niche markets, such as the enterprise. Many enterprises are already embarking on major employee mobility initiatives, in which the potential for integrated Wi-Fi and mobile communications is highly valued.

- **Establishing deep partnerships with MNOs.** In helping to reach new market segments, a Wi-Fi-first strategy can create added value for partner MNOs by delivering traffic the MNO might not otherwise have access to. Sub-segment specialization also increases the likelihood that an MVNO will not be a competitor to an MNO, but rather a complementary service provider to be encouraged.
- **Expanding value propositions.** As the reach and power of Wi-Fi networks grows, so too does their potential to serve as a platform for the delivery of

Other reasons to go Wi-Fi first

Choosing Wi-Fi over mobile networks might seem an odd move for an MVNO, but research shows that is exactly what many mobile customers are doing with or without the help of their service provider. As Mobile World Live notes: “Wi-Fi is the dominant data access technology for mobile device users, in both countries where high-speed cellular networks are ubiquitous and where mobile data infrastructure is poor.”⁸

For further context, as of 2016, smartphone users were spending more than 50 percent of their time on Wi-Fi networks. In the Netherlands the level was as high as 70 percent. The figures have led researchers to declare that “Wi-Fi has become a far more important mobile data technology than 3G or 4G.”⁹

It is likely that Wi-Fi network usage is primarily driven by cost considerations; subscribers do not want to pay network charges at home or at work. Nevertheless, frequent and prolonged Wi-Fi use is bound to shape user experience and expectations for smartphone services. Therefore, it makes sense for MVNOs to provide a Wi-Fi offering whenever possible.⁹

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“Wi-Fi is the dominant data access technology for mobile device users.”

new customer services. Examples might include location-based marketing, integration with home entertainment and automation systems, or application performance enhancements.

Smart MVNOs might even want to use the promise of Wi-Fi-quality connections as a carrot to lure low-value, less-loyal prepaid customers onto regular subscription plans, as well as potentially attracting new subscribers and reducing churn overall. The latter is particularly important given research that shows poor coverage and poor data speeds are two of the top five reasons why subscribers change their mobile operator.¹⁰

In addition to providing a consistently high quality of user experience, a Wi-Fi-first strategy allows MVNOs to offload data and thus reduce wholesale costs and protect operating margins, particularly when dealing with roaming customers.

However, to implement a Wi-Fi-first strategy, MVNOs need to be sure they can offer wireless connectivity that is as good as that found at home or at work, or indeed on a mobile network. This requires careful consideration of the Wi-Fi connectivity partner.

Wi-Fi partner considerations

Without going into too much detail, we advocate specifically considering the following factors when choosing a Wi-Fi connectivity partner:

- **Unlimited data capacity and connection time** with fixed, per-user pricing, for simple, predictable financial planning.
- **An understanding of MVNO challenges** and requirements, along with easy integration capabilities.
- **Global reach**, especially a presence across all major urban centers, preferably with a choice of networks in key hubs.
- **Automatic selection of optimum hotspots**, to ensure the best possible user experience (see panel).
- **Secure connections** to serve the needs of high-value markets such as enterprise mobility.
- **Optimal routing** to maintain quality and cap costs.

Conclusion

To paraphrase Charles Dickens, now is the best of times and possibly the worst of times for MVNOs. Never before has it been so easy to set up an MVNO operation, and never before has competition for subscribers been so fierce. To stand out in this crowded landscape, MVNOs must work harder than ever to provide a differentiated service, for example by serving new market segments, delivering new services or creating value-added partnerships with MNOs.

Achieving all of these aims is not easy, but there is one technology-based approach that can help. Having a Wi-Fi-first strategy will not only ensure differentiation, market

engagement and added value, but also sits well with mobile users' existing habits: people use wireless local area networks for connectivity more than half the time all over the world, in places as diverse as China and Iraq.¹¹

Furthermore, implementing a Wi-Fi-first strategy has never been easier, thanks to the presence of providers that can offer simple product packages, global reach, quality connections, security, optimal routing and a good knowledge of MVNO requirements. When it comes to Wi-Fi first for MVNOs, now is definitely the best of times.

Best available connections

Mobile users today already show a distinct preference for Wi-Fi. But not all Wi-Fi connections are created equal, given the fragmented nature of the technology. The service experience of a hotspot can change from moment to moment, rendering it unsuitable to a mobile professional who needs Wi-Fi to perform high-bandwidth tasks. Moreover, without IT intervention, mobile professionals often connect to unsecured, free Wi-Fi. To overcome the inherent challenges of Wi-Fi, iPass has launched a proprietary technology called iPass SmartConnect™. iPass SmartConnect uses advanced analytics to identify and rate access points based on factors such as signal strength, speed, bandwidth availability and connection success rate.

Its self-learning algorithm continuously improves its knowledge of global Wi-Fi networks, allowing iPass to select the best hotspots in real time. The user only has to connect once to iPass, which keeps you connected to the best Wi-Fi networks as you roam. Features include:

- Automatically connecting users to the best hotspot for their needs
- Adding new hotspots where users need them most
- Reducing costs through optimal cost routing
- Connecting customers securely
- Identifying the best hotspots

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About iPass

iPass is a leading provider of global mobile connectivity, offering simple, secure, always-on Wi-Fi access on any mobile device. Built on a software-as-a-service (SaaS) platform, the iPass cloud-based service keeps its customers connected by providing unlimited Wi-Fi connectivity on unlimited devices. iPass is the world's largest Wi-Fi network,

with more than 60 million hotspots in more than 120 countries, at airports, hotels, train stations, convention centers, outdoor venues, inflight, and more.

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