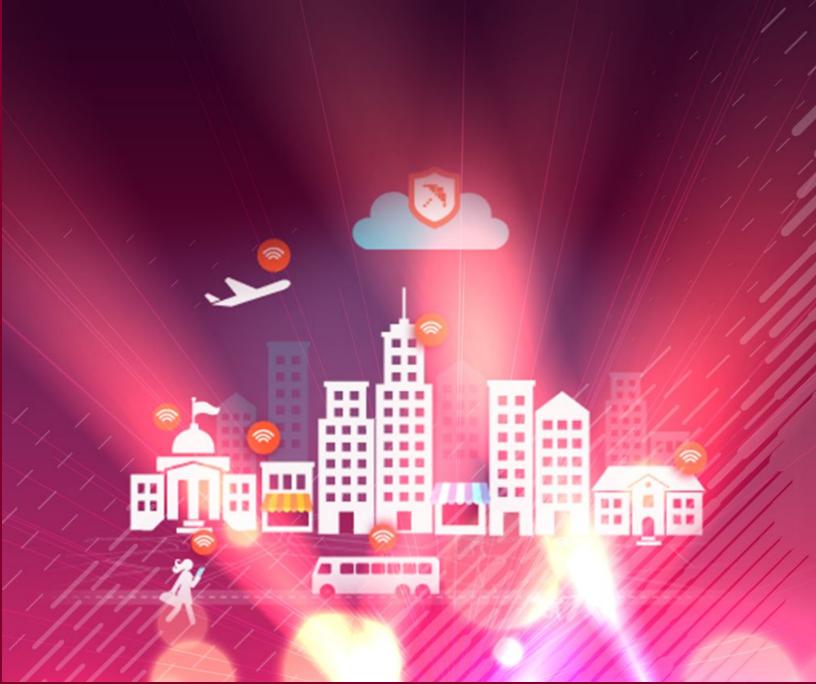


Levelling the Mobile Playing Field Helping MVNOs become Wi-Fi First



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About the author



Hamish White

Founder and CEO

An international Mobile telecommunications expert with 18 years' experience covering 4 continents. With a speciality in managing greenfield or transformation projects, Hamish's core competency is in a deep and diverse understanding of Mobile technologies and implementation planning coupled with a diverse understanding of the Mobile value chain. Hamish's

value lies in bringing strategy to life through technology innovation, strategic planning, commercial negotiation, robust governance, organisational design and people management.



Levelling the Mobile Playing Field

Helping MVNO's become Wi-Fi First.

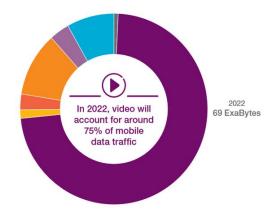
Data use has grown by 50% in 12 Months

Mobile data traffic has reached 7 exabytes per month – a growth of 50% in the past 12 months – and is predicted to reach 30.6 exabytes per month by 2020². Given consumer appetite for data and devices, MVNO's can expect to receive ever increasing demands from their customers for faster network speeds and unlimited data plans, but their expectation is for cheaper prices – mobile operator revenues declined at around 1.7% in 2015 and are expected to continue to decline each year. Without the ability to offload data to the Wi-Fi networks owned by major carriers, how can MVNO's respond to this customer demand without further compromising ARPU?

The Challenge for MVNO's

Currently, major carriers have the upper hand. In owning both the mobile and the Wi-Fi network, they can offload their data traffic which helps to keep their costs down. In the meantime, MVNO customer data traffic is distributed over the mobile network which negatively impacts margins and the MVNOs ability to compete on price. Increased customer demand for data means that overall ARPU's in mature markets such as the UK and Europe are declining.

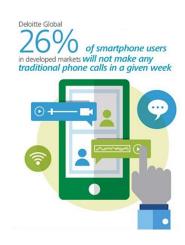
Figure 1. Forecast Data Traffic in 2022



With customers enjoying 'all-you-can-eat' data bundles, and increased pressure as carriers and competitors offer discounted prices to attract new subscribers, this places MVNO's in a very difficult position.

Live video and video streaming capability in social networking apps is pushing data usage up at previously unseen speeds which is expected to continue to increase as consumers document every important moment (and sometimes trivial experience) of their lives using video.

For Facebook, video is core to its strategy to customer retention and advertiser revenue – it delivered 8 billion video views in 2015 and with Facebook Live now mainstream, videos are being given precedence on newsfeeds. With a 5 minute video using up around 58mb of data, being able to deliver a great customer experience, without a nasty billing surprise, is critical.



The Challenge for Consumers

Consumers are changing their view on what they want. Many are switching out high margin voice calls to data only or apps – 26% of smartphone users will not make any traditional phone calls in any given week. Live video streaming is changing the landscape of what consumers expect from their mobile devices and how they interact with them – so much so that mobile video traffic is set to grow by 50% YOY until 2022 when it will be expected to account for nearly three quarters of all mobile traffic².

This switch towards non-voice traffic means that customer expectations from their mobile carriers and mobile devices have changed – we see their needs sitting in five clear categories.

Mobile traffic by application category CAGR 2016-2022 (percent)

50%

Ē

Software

PSP

(((

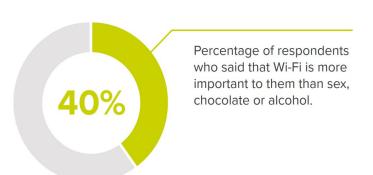
Social

Figure 2

Consumer Expectations		MVNO Needs to Offer
Speed	-₹ 3 °	Real-time streaming
Accessibility	Ė	Single Sign-On (SSO)
Cost		Deliver more for less
Security	(A)	Privacy on the customer's terms
Availability	-	Wi-Fi everywhere

Why Wi-Fi is the Answer

Figure 3. Importance of WIFI to Business Professionals



In the eyes of the user, Wi-Fi not only delivers on expectations, it's also the default choice when it comes to selecting a network. 63% of business professionals interviewed by iPass cited that Wi-Fi was their preferred service and 40% of all respondents reported that Wi-Fi was so important to them being able to live their

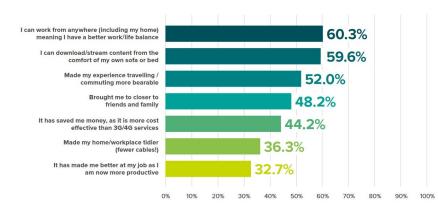
lives that it had become more important than sex, chocolate, or alcohol.

Figure 4. Maslow's Hierarchy of Human Needs (amended)



We believe Wi-Fi have reached the nirvana sought by every technology, it no longer needs to have it's features explained. People think about Wi-Fi in terms of what it enables them to do not how it works. 74.9% of people believe it has improved their lives⁴, and what was once a joke based on Maslow's hierarchy of needs has become mainstream⁴.

Figure 5. How has Wi-Fi improved your life



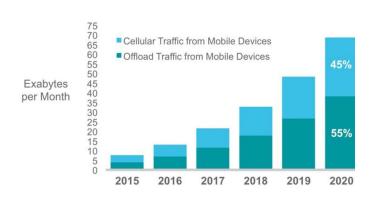
Statistics like these may be more light-hearted than some people would expect from a review of issues impacting MVNO's, but they illustrate a far more serious point which informs every organisation that has to deal with customers: the customer's

perception is reality, and it forms the starting point for other aspect of that customer's interaction with the brand.

From the basepoint of how important Wi-Fi is in an individuals life, we're able to break it down into what it is about Wi-Fi that makes it quite so important which is shown in Figure 5.

Time to Offload – Unless You're an MVNO

Figure 6. Mobile Data Traffic Offload Forecast



With ownership of over 5million UK Wi-Fi hotspots and 13 million international hotspots offered to it's broadband and mobile customers as part of their contract, BT gives its customers an always - connected experience. At the same time, BT is able to leverage its network assets to reduce its overall costs by

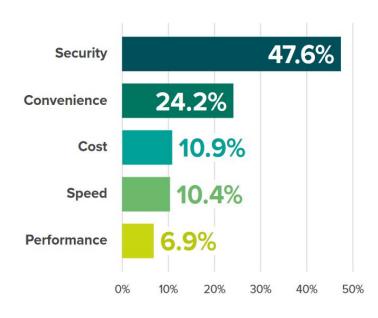
offloading data traffic from mobile to Wi-Fi. The customer pays the same, but BT's costs for transporting the data are far less than when conducted over the mobile network. Predictions are for more data traffic to be offloaded to Wi-Fi from mobile networks than remain on mobile networks by 2020⁴

If you're an MVNO working with BT/EE, however, it's highly likely that this Wi-Fi network isn't available to you, and your data traffic will continue to be routed at the higher cost. The same goes for MVNO's working with other major operators, which means there is a two-tier system at play where MVNO's are placed at a distinct disadvantage. When you're managing the customer relationship and have invested time, money, and resource in building a brand, the actions of a major network operator which are beyond your control, have the ability to materially undermine the success of your business.

As well as penalising the MVNO, consumers and business users are losing out too because the large mobile operators are focused on keeping customers exclusively on their networks. A BT Wi-Fi customer who cannot find a hotspot is still going to have to sign up to 'The Cloud' or their mobile carrier's Wi-Fi hotspot package – therefore paying twice for capability that is already out there.

Safe and Sound

Figure 7. Reasons for using Mobile Data Services



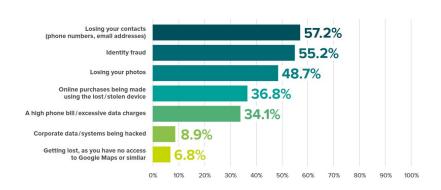
to say that everyone is sensible – F-Secure

With Wi-Fi the obvious answer for consumers and business users alike, what's stopping people from never using mobile for their data? According to iPass the overwhelming answer is one of security. With public Wi-Fi networks acting as an open door to hackers and a direct route to identity theft, business users in particular are reticent to log on to a hotspot that cannot guarantee their security – even if they are only logging on to check the football scores before a flight. But that's not

famously set up a fake Wi-Fi hotspot which included a clause for users to give up their first born child, and people still signed up.

Users who do read the agreement before they tick the box often find themselves in a cost vs risk dilemma. Lots of people don't want to pay for Wi-Fi, but they do want to get online.

Figure 8. Customer Smartphone Security Concerns



They are extremely worried about the loss of personal data, but they do want to FaceTime their loved ones. The following shows the key worries that customers have about data security on their mobile devices⁴:

Being able to solve the challenge of providing Wi-Fi that is 'always there', and offering the customer reassurance that their data is safe, creates an extremely sticky customer relationship as it responds to two of the most important needs a Wi-Fi consumer has. And we believe that there is a solution.

The MVNO Opportunity

Figure 9. Mobilise Hotspot International Wi-Fi Partners

With multiple millions of secure Wi-Fi hotspots world-wide, managed by hundreds of mobile operators, we saw it should be possible for all users (whether business or consumer) to enjoy a safe and seamless network connectivity experience whether they were watching Netflix, Facetiming, or sharing a presentation with their management team via Skype for Business. The infrastructure was already



there, we just needed a way to make it available that didn't involve multiple accounts, contracts and login details, as this makes for a clunky, and potentially expensive experience.

With hundreds of network operators world-wide, and very few of them 'talking' to each other, we knew there was a huge latent opportunity to open up the potential of this network to MVNO's which would benefit them, and in turn their customers.

Thanks to pioneering work undertaken by Mobilise in partnership with iPass, it has become possible to access 57 million of these Wi-Fi hotspots in 120 countries via one contract. Not only does this provide users with global accessibility to the best networks, and the ability to work and relax how they want, when they want, it is also becoming one of the most valuable data sources in the world for information on Wi-Fi hotspot performance and usage. iPass now have has the ability to create global heatmaps using Big Data to deliver knowledge that could help to shape how organisations deliver services to consumers and business users in the future.

A Competitive Advantage

Figure 10. Mobilise Hotspot offers a Simple User Experience

For Mobilise, we saw immediately how iPass' offering could transform profitability for MVNO's helping them to preserve their independence and putting them on a more level playing field with the major operators based on customer experience. So even if BT don't want to share their Wi-Fi hotspots, as part of an MVNO wholesale agreement, MVNO's can now access them and offer them (along with hundreds of other mobile operator's hotspots)



directly to their customers. What we have created is a white label app that helps MVNOs to rapidly enter the OTT and Wi-Fi break out market using a rich feature set, with a 4-6 week launch time and at a fraction of the cost of developing their own applications from scratch. The Mobilise offer includes applications for both iOS and Android, with customer support, billing, marketing support and even a 'my account' portal & website if required.

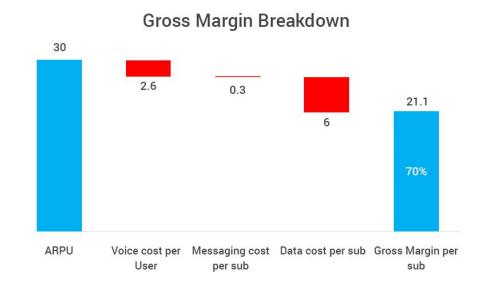
Why Wi-Fi First?

We see two key reasons, and both are connected to creating a business that is sustainable in a market where ARPUs are predicted to continue to decline.

It makes commercial sense

Having adopted a Wi-Fi First strategy, Scratch Wireless has managed to achieve 70% gross margin. This business Transformation has been so marked that Alan Berry, CEO of Scratch Wireless, has authored an entire book on how adopting this strategy is "Knocking Sense into the Smartphone".

Figure 11. Mobilise Hotspot offers a Simple User Experience



Customers want it

And if you can't give your customers what they want, they will go somewhere else.

Summary

By providing access to a level playing field, and the ability to implement a Wi-Fi First strategy in a nimble way, this presents the MVNO market with the opportunity to create longer, more profitable customer relationships. It also helps MVNOs to regain control of their margins and do business on their own terms - not based on what access the mobile operator is prepared to grant them. This is a chance for MVNO's to show how independence can mean greater innovation, greater emphasis on the customer experience, and a more engaging brand to do business with. There is no question that the demand for access to more data, faster, is out there, and it's only set to grow. The market is ready, the infrastructure is ready, and Mobilise is ready to help MVNO's put more margin back into their business.

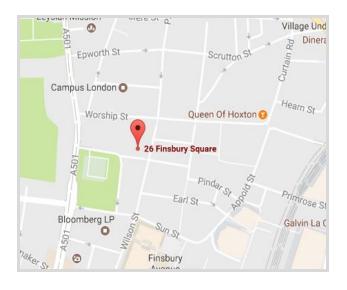
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About Mobilise Consulting

Mobilise Consulting is an established consulting and software company with proven expertise in launching and developing solutions for MVNOs. We're committed to helping the MVNO market monetise Wi-Fi through winning strategies – so much so that we've invested in creating a series of webinars that are free to access: https://goo.gl/XaAs7m

Clients engage us to support their full mobile services lifecycle: from strategy consulting, products and services development, and solutions design, through to project management, software development, and operational support services. Our MVNO clients include the likes of Carphone Warehouse, Freedompop, and UPC. To find out what Mobilise could do for you, please get in touch.



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