

Wholesale **MOBILE**

The conventional view of the mobile virtual network operator is out of date. Service providers that buy wholesale minutes at a discount price and sell no-frills telephony and text messaging to price sensitive customers are finding it hard to survive. This old guard will soon be superseded by virtual operators whose business models come from the world of internet services.

AUTHOR



Duncan Stewart is an industry consultant working in the telecommunications team of our business transformation group. His expertise includes strategy and marketing, value propositions and business development. He is particularly interested in innovation and R&D from both business model and technology perspectives and regularly works with Fujitsu Laboratories on technology futures.

Outside of the office Duncan is often found on the rugby pitch or supporting his favourite team, the Leicester Tigers.

duncan.stewart@uk.fujitsu.com

Problematic partnerships

The wholesale channel for mobile network operators is open and growing, but it is riddled with problems.

Industry analysts highlight the increasing value of the mobile virtual network operator (MVNO) business. Yankee Group projects that MVNO services in the US will produce revenues of \$10.7 billion by 2010 and attract 29 million subscribers, although a small elite of first-tier companies will account for almost 80 per cent of this market. On both sides of the Atlantic, however, prominent MVNOs have failed, raising questions about the sustainability of businesses that do not own a mobile infrastructure but market themselves as independent service providers.

In theory, this business model makes economic sense for both the MVNO and the network operator. Virtual players usually target niche segments of the community that the incumbents find difficult to reach, thus generating traffic and revenue streams that would not otherwise exist. The reality today, particularly in western Europe, is far from harmonious. Most MVNOs are struggling and the operators face a toxic combination of business cannibalisation, market saturation and economic downturn.

Hundreds of MVNOs have designed and launched new services, but very few stand out as true success stories. Can we

attribute the failures to bad marketing and poor business decisions by individual companies? Or were they due to viability problems with the MVNO business model itself?

The impact of MVNO partnerships on the network operator needs careful analysis as well. Even the best wholesale plan can cause conflicts of interest. The scale and growth potential of this business makes the operators keen to compete for new contracts.

The UK wholesale market alone will be worth about £1 billion this year and could double in value by 2012¹. Choosing the wrong MVNO strategy can, however, damage an operator's overall business.

The costs of building and managing an infrastructure to support MVNOs are high and operators might never recover their investments. Furthermore, MVNOs that offer standard voice and SMS services exacerbate the industry's problems with customer churn and the downward pressures on pricing and average revenue per user (ARPU). Operators need to evaluate the potential impact of resellers on their core business; co-ordinating their wholesale and retail packages is a major challenge.

As they weigh up the opportunities against these risks, it is also vital for operators to understand how the MVNO market is going to change.

¹ http://www.mobilenewscwp.co.uk/News/97108/uk_networks_ramp_up_mvno_activities.html

Understanding success and failure

In the early years of this decade, when the hype around the MVNO model was at a peak, it was widely believed that niche branding would become the best way to attract and retain subscribers on mobile networks. What actually happened was that early MVNOs, such as Virgin Mobile and Tracfone, saw that the pre-paid business was still relatively untapped and took advantage of this gap in the market before the network operators ramped up their own pre-paid offerings. Virgin Mobile, which launched in 1999, was the world's first MVNO and became the most successful in both the US and Europe. Many others tried to emulate its business model, but failed to establish a significant market presence.

MVNOs proliferated in the Nordic countries before they appeared in other markets. The new entrants differentiated their services by cutting voice and text prices and took customers away from the established operators. The net result was considerable decline in ARPU and falling share values across the industry. Stability was restored after most of the leading MVNOs were acquired by network operators².

Japan proved to be an easier environment for MVNOs, partly because they met a rising demand for data services and partly because there were only two mobile operators that could act as wholesalers.

The US climate was much harsher. New MVNOs such as Helio and Amp'd promised to be different by concentrating on value added applications and content-based services. Subscriber numbers for both have come in well under forecast leading to substantial losses. Even Disney, one of the biggest brands in the world, tried to penetrate the US mobile market through two separate initiatives; both attempts ended in closure³.

Other MVNOs, however, have survived and grown by targeting specific social categories. These successes include Labara Mobile and Lycamobile, which specialise in telephony and SMS services for ethnic groups, and Blyk whose pan-European service targets young people who are willing to view advertising in exchange for free minutes and texts.

In general, though, it has become increasingly difficult for any MVNO to compete against the major operators in basic voice and SMS services. The spread of flat rate voice and data plans, not only for post-pay but also for pre-paid services, has strengthened the hand of the network operators. MVNOs, whose costs are determined by the wholesale price of the minutes that they buy, cannot compete with the all-you-can-eat telephony tariffs. Furthermore, the network operators are better placed to secure the most popular handsets and can negotiate better terms with the suppliers. The volumes at which MVNOs trade are seldom high enough to get the OEMs excited.

As we move into a new era of wireless communications it is clear that the traditional MVNO model is flawed. Voice is now a saturated market and reselling bulk minutes is no longer economically viable. MVNOs are therefore moving away from conventional telecommunications and into activities that look more like internet services.

² http://www.ofcom.org.uk/research/cm/interim/feb06_report/comms_mkt.pdf

³ <http://www.moconews.net/entry/419-disney-mobile-closingsecond-disney-mvno-to-shutter-wdig-will-explore-l/>

Opportunities for MVNOs

Most of the emerging opportunities for MVNOs involve data services or machine-to-machine (M2M) communications. New handset types such as the iPhone, coupled with faster speeds and quality improvements on the networks, have accelerated the demand for mobile data delivery and are paving the way for more vertical market services. Wireless M2M applications have advanced beyond the early metering applications that required only a low data rate and now support services like real-time video surveillance and medical monitoring. The compound average annual growth rate for M2M services in Europe now stands at 42.9 per cent and forecasts suggest that this rapid expansion will continue⁴.

The introduction of information devices that connect to the internet through wireless networks supports the long term progression towards cloud computing. In ten years time all networks will be ubiquitous, high-speed and IP-based. From a user perspective this will mean the replacement of items like cash, keys and loyalty cards with connected devices. For the MVNO, cloud computing presents opportunities to develop new types of service and to experiment with alternative business models.

New trendsetters are starting to appear. Internet retailer Amazon.com, in-car navigation systems vendor TomTom and mobile messaging infrastructure service provider mBlox have entered the wireless services arena from very different directions, but each is now the most prominent player in an emerging cluster of mobile applications.

One such cluster focuses on high-speed content delivery. Amazon has negotiated an MVNO agreement with Sprint to support its Kindle device – a portable reader that downloads books, blogs, magazines and newspapers to a crisp, high-resolution display that looks and reads like real paper. Sprint's EVDO cellular network enables Amazon to

download any of 88,000 book titles from its store in less than one minute to a Kindle user in any location with cellular coverage.

A second cluster is emerging around medical services. Qualcomm has announced the launch of an MVNO, LifeComm, that will help individuals to live with conditions like diabetes, asthma and heart disease. The company describes its service as a 'virtual nurse' that will evaluate various bio-measurements, assist users to comply with prescribed treatments and provide advice and information when they are needed.

Wireless applications are already making an impact in transport management and additional services are under development. Navigation equipment supplier TomTom, for example, plans to become an MVNO in order to deliver traffic updates and other data to its GPS-enabled devices. This cluster will also include integrated reservations for public transport and 'smart city' applications that control traffic lights and street cameras. The automotive industry, meanwhile, is working on wireless communications services to reduce the risks of collision, alerting drivers to potential dangers or even taking control of the braking systems on their cars⁵.

The advance of wireless data services is also producing a cluster of companies that will provide operational support to the mobile applications industry. The trendsetter here is mBlox, which originally offered transmission and financial settlement services for text messaging and has now positioned itself as a transactions management intermediary between mobile service operators and mobile content providers. This company, which runs network management centres in North America, Europe and Asia-Pacific, has thus emerged as a mobile virtual network enabler (MVNE), pioneering a business model that should also be considered by the major operators.

⁴ Ref. Berg Insight

⁵ http://www.ofcom.org.uk/media/news/2008/05/nr_20080507

Strategies for operators

The future prospects for the mobile operators' wholesale divisions will not only depend on their ability to select suitable MVNOs from an increasingly diverse population. We believe that the design and management of their network enablement platforms will also be critical to success. Different operators are looking at this challenge in different ways.

Platform investments will be costly and the operators should look for economies of scale. This will probably mean building a pan-European infrastructure instead of introducing resources on a country-by-country basis. Investment sharing can also make the MVNE model economically viable. Radio Area Network infrastructure agreements have demonstrated the commercial advantages of this principle and it is just as applicable to network enablement.

Mobile operators should therefore choose between two strategic options. They can either build one central platform to support a range of MVNOs in multiple countries or they can combine their resources and negotiate joint platform outsourcing arrangements with a systems integrator. The outsourcing option has the additional advantage of stronger data protection, as long as the systems integrator ensures that operators and MVNOs are never given access to information about their competitors.

Both approaches reduce the operator's capital expenditure but preserve the ability to differentiate its offering for MVNOs by delivering a different service class or basket to each partner.

Platform outsourcing projects are underway inside single countries, with a systems integrator managing the MVNE infrastructure and delivering back office services like billing and customer care. These resources can be scaled up to support pan-European partnerships, multiple MVNOs that operate in different clusters and an end user population that ranges from individuals to large metropolitan authorities.

Operators can and will share the rewards of growing the new MVNO markets, but they must look far beyond the price of wholesale minutes. Success will come from careful and appropriate investments, selecting the right partners and an in-depth knowledge of the new market dynamics.

Duncan would welcome your comments by email (duncan.stewart@uk.fujitsu.com) or at uk.fujitsu.com/opinion