Delivering profitable mobile broadband

Northstream white paper

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Executive Summary

In many developed markets, mobile broadband experienced continued strong growth in 2008 and competes with SMS for the best selling service after voice. However, traffic and resulting costs are becoming so high that operators need to take action in order to manage profitability.

The rules known from the mobile voice business no longer work: Broadband ARPU does not scale with traffic, competition comes from multiple sides, and new types of devices are needed in order to satisfy user needs. Operators are facing usage patterns where a small share of subscribers creates a large share of traffic, leading to revenue shortfalls and network quality issues.

Operators must grow network capacity and lower their "cost per bit" - but this insight alone is too simple: They need a combination of better traffic management, higher cost efficiency, attractive services and devices, and clever marketing. Action is needed in various areas such as network efficiency, staff, business processes and support systems.

In addition, partnering with internet companies, electronics retailers or traffic wholesale partners helps building differentiated offerings, selling attractive devices or targeting new types of subscribers.

Improving profitability starts with the analysis of the operator situation and its market environment. Once a strategy for profitability growth has been defined, activities in each area must ensure not to simply reduce cost, but instead improve the input/output ratio of each cost. With the right sequence and priorities of efficiency, partnering and marketing measures, operators can progress on their journey towards mobile broadband profitability.

The surprise success of mobile broadband

During 2008, many operators in mature markets saw a new service enter the list of top revenue generators - mobile broadband subscriptions purchased by laptop users. While business of most operators is still dominated by selling voice minutes and messages, mobile data revenues have surpassed SMS sales in some countries – a phenomenon that has taken the telecoms industry by surprise.

For example, Sweden has seen mobile data traffic tenfold in the first half of 2008 compared to the same period in 2007. The number of subscribers threefolded, with the average mobile broadband user consuming 47 MB of data per day. The success of mobile broadband provides operators with traffic that was long sought through different strategies, often involving proprietary and operator-exclusive mobile services created with high investments.

However, the new world of mobile data looks different than expected in earlier strategies: rather than being locked into mobile portals with limited offerings and high prices, customers want to replicate the internet experience known from PCs and high-speed connections on their laptops, using mobile broadband as a convenient, ubiquitous and inexpensive access method.

This confronts mobile operators with similar issues as fixed line broadband providers, many of which face a minority of "power users" that create large amounts of traffic over flat rate contracts.

While there is clear demand for mobile broadband access, a key question for operators is how to profitably provide and market the required capacity, given high customer expectations and fierce competition from DSL, cable and mobile providers. While reducing cost is key, operators need to think further in order to become competitive mobile broadband players. Revolving around cost and revenue management, this paper discusses the main levers operators can utilize which are tariffs, efficiency, devices and marketing.

Data tariffs providing simplicity and capacity management

In a world where users regard mobile data as just another way of accessing the internet, pricing must follow suit and align with the structures of fixed line broadband.

Although this seems to contradict the pricing strategies that mobile operators have historically followed, it actually supports profitability: Simple tariffs without hidden restrictions are easier to implement, sell and support than complicated pricing structures – and they attract subscribers already through word-of-mouth advertising. OSS/BSS and process cost savings are additional internal benefits.

Simple pricing does not mean that operators give up potential for differentiation. Northstream has analyzed availability and pricing for prepaid mobile internet in Sweden, Poland and Germany - as the table shows, pricing leaves room for creativity, which operators utilize in different ways:

	Operator and service	SIM + modem / €	Traffic charge / €
	Tele2 Mobilt Bredband Kontant	74 (incl. 1 GB)	17.54 / 1 GB (30 days)
	Telenor Kontantkort	148	0.47 / MB
	Telia Mobilt Bredband Veckosurf	9 (w/o modem)	9.21 / week
	Tre 3BredbandKontant	83	2.70 / day, 9.21 / week or 27.74 / month
	Era	(no prepaid offering)	N/A
	Orange Free na kartę	129	0.007 / 100 KB
	Play Online na kartę	73	0.007 / 100 KB. 1,91 GB bonus for top-ups above €7.36 or 3.84 GB for top-ups above €12.27
	Plus iPlus simdata	5 (w/o modem)	0.007 / 100 KB
	e-plus	(no prepaid offering)	N/A
	O$_2$	(no prepaid offering)	N/A
	T-Mobile Xtra web'n'walk	80	4.95 / day
	Vodafone WebSessions	90	1.95 / 30 min, 2.95 / h, 4.95 / day

Table 1: Comparison of prepaid mobile broadband tariffs, February 2009

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While subsidized notebooks or netbooks are a valid proposition, operators must not ignore the growing number of customers already owning data cards or laptops with built-in 3G. These customers can be served with SIM-only contracts on a prepaid or postpaid basis, providing a greater traffic allowance in lieu of device subsidies.

Such users can more easily be served at the operators' own point of sale, as they do not require the large choice of mobile computers that other subscribers would expect.

Whatever tariffs operators offer – the management of traffic allowances and thereby network capacity is a key issue. Customers accept that their voice buckets contain a limited number of minutes, as long as they perceive the limit to be above the usage level they would typically reach.

In a similar fashion, data allowances should be tailored to different customer segments, avoiding a scenario where a fraction of customers causes a network overload that leads to dissatisfaction among the majority of profitable users. "Intelligent caps" are needed, tailored to each target group, tariff and subscriber: Once allowances are reached, operator options include extra charging, lower speeds, connection cut-off, or continued usage free of charge.

Similar to mobile telephony, a large share of mobile broadband usage occurs at homes and offices, where users are served by their home networks. International data roaming is usually prohibitively expensive, and some operators even recommend not using mobile internet at all when abroad – a strategy of foregoing revenues.

Negotiating bilateral data tariffs with international roaming partners can lead to a win-win situation: Consumer and business subscribers will welcome daily or weekly mobile data packages which provide ease of use, compared to the hassle of paying for and connecting to different foreign WLAN providers. For both operator partners, roaming usage provides traffic that is much more profitable than traffic from home users.

A company-wide approach towards efficiency

Already before the mobile broadband boom, many operators achieved great success in improving network efficiency. With growing demand for data capacity, these efforts continue – supported by infrastructure providers offering solutions such as flat architectures, packet-based backhaul or radio network technologies with higher spectral efficiency.

Increased network efficiency helps operators deliver traffic at lower cost per bit, and enables serving geographical regions and traffic scenarios that would have been unprofitable otherwise. These advantages also present the reasoning for various network swap-outs that operators have initiated recently.

The growing data usage and continued price pressure creates the need for data traffic management solutions with an awareness of network load, services and policies. Most major mobile infrastructure vendors provide such solutions - in addition, a number of smaller companies such as Bytemobile, Camient or Flash Networks have attracted operator attention.

While throttling or blocking bandwidth-hungry services may not be desired, it is important for operators to be able to manage data capacity per service and user, ensuring that each subscriber enjoys network usage in line with their expectations and data plan.

Network efficiency is not only about choosing and deploying technologies, but also involves aspects such as partnerships with competitors, public relations or governmental policies. Network sharing is an example where operators jointly serve a regional market – an approach that remains attractive in the light of uncertain energy pricing, cost pressure and the need to grow coverage and performance.

As another example, the growing public awareness of the carbon footprint created by telecom networks means that operators must interact with governments and other stakeholders in order to decide about how to become more energy-efficient – an aspect of growing importance for end user purchases and the operator's public image.

While network efficiency is a key issue, it is by no means the only area where operators can increase their efficiency. Equal attention should be paid to staff development and allocation, outsourcing and partnerships, business processes or BSS/OSS improvements.

Rather than just cost cutting, efficiency strategies should be designed to improve the input/output ratio – giving operators valuable means to steer profitability of mobile broadband and other services. Given its situation and strategic objectives, each operator needs to identify the key areas where efficiency can be improved, and prioritize measures based on these objectives.

Selling mobile computers through new channels

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Mobile phone portfolio and pricing are key decision criteria for many end users when deciding whether to stay with their current operator or churn. Similar considerations apply for laptops and netbooks – besides choice and pricing, customers are interested in aspects such as industrial design, brand, ergonomics, performance, screen size or weight. Most operators maintain a mobile phone portfolio including dozens of devices, giving choice between different brands, price ranges, designs and device types.

Customers looking to buy a laptop see this width of choice at specialized retailers or large consumer electronics chains. These channels possess logistics processes and points of sale that generate the volumes required for profitable operations – an asset that mobile operators cannot easily replicate in their own or in their partners' phone-centric retail presence.

Lack of space, distribution, staff competence and after-sales are apparent issues. The fact that most customers buy mobile computers where the choice is largest makes operator partnerships with these channels an obvious strategy.

This does not mean that operators should neglect mobile broadband sales in their own sales channels: Offering a limited range of high-volume netbooks is a feasible approach for generating end user awareness and subscription sales. This comes in addition to USB sticks, data cards and routers - products that do not require stocking multiple brands or models each.

Already today, most major laptop manufacturers have signed distribution agreements with mobile operators – an attractive option for operators with a strong presence of own-branded stores. The photos provide examples of device categories designed to provide mobile broadband connectivity:

Figure 1: Categories of mobile broadband devices. Models shown are Samsung NC10-anyNet, Option iCON 401, 4G Systems XSBox R5 and HTC Touch Pro

Furthermore, selling internet-enabled mobile phones in conjunction with flat rate data plans is an attractive proposition. The iPhone has started this trend, and the growing choice and quality of PDA and touch screen phones makes them suitable as a complement to netbooks, especially considering functionalities such as media player and navigation which benefit from mobile broadband for data uploads and downloads.

Offering internet-enabled phones and mobile computers also provides operators with attractive possibilities for cross-selling of devices, services and subscriptions.

Cost-efficient marketing of the "smart pipe"

Similar to voice, also mobile broadband is regarded as a service that is difficult to differentiate with. Besides the price, typical marketing arguments include speed, network coverage, device offering and contract terms. These are valid arguments that should be part of a mobile broadband proposition – but before operators can turn this into a profitable and differentiating business, they must possess the required network assets, lean cost structure and versatile sales channels; aspects discussed in the above paragraphs.

The next step is to deliver on the promise: For example, speed should not only apply to data throughput and latency, but be present throughout the customer experience: service subscription, device delivery and installation, connection set-up, stable throughput and after-sales support are areas of differentiation.

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Depending on market situation, target groups and operator assets, operators can focus on different aspects in their mobile broadband propositions. Bundling can be used in order to cross-sell other services such as fixed broadband, media subscriptions or other premium services such as email, file storage, photo finishing or virus protection.

Similar to the MVNO model, mobile operators can offer their data capacity under a wholesale model, enabling other companies to offer tailor-made services and devices to their own users. In another approach, operators can partner with internet companies in order to promote these partners' services and thereby provide further incentives for end users to sign up for a mobile broadband plan, or upgrade their existing plan.

An increased focus on online sales and customer care supports the need for cost-efficiency. For most users, broadband connections have become a lifeline which they maintain also in times of a weak economy. In parallel, e-commerce has become commonplace in many markets.

This provides a good case for operators to further develop and promote their online presence – realizing though that this does not replace physical retail and personal contacts. High street stores remain crucial elements of operator strategies to build their brand, entertain customer dialogues or show off services and devices. Also stores hold potential for efficiency gains, for example through staff-assisted self-care terminals that are connected to the operator's online customer care systems or their e-shop.

Conclusions

Mobile operators are advancing on their learning curve. Lessons have been learnt regarding the origins of service innovation (mainly the internet, but also other industries such as providers of GPS navigation), the preferences of end users and the positioning of mobile broadband services.

There is room for charging a premium for the ease of use and ubiquity of mobile broadband, but rules are different than in the mobile voice age: Due to the flat rate character of mobile broadband and the high level of competition, operators must pay constant attention to cost structure, cost level and efficiency across their business areas.

In order to manage profitability, the corporate strategy has to embrace a number of areas such as tariffs, internal efficiency, devices and customer proposition. With well-prioritized and timed steps, operators can gradually increase their cost efficiency and profitability, while achieving high customer satisfaction and loyalty at the same time.

Creating profitable mobile broadband propositions also requires open mindsets, flexible organizations and the ability to partner – concerns about losing "customer ownership" towards internet companies or other competitors are worth discussing, but realism is key: Subscribers demand openness, and operators that offer the best proposition will make the deal. The challenge and action for operators is to find out how to benefit from other parties' service innovation, and build up their own brand and differentiation at the same time.

Northstream understands the various aspects of the broadband and internet business. Through our industry experience and our work with different types of players, we are able to support operators and other types of industry stakeholders on their journey towards profitable mobile broadband.

Contact us to learn more about how we can work together in order to understand your customers, your market and your situation, define your strategy and implement it in order to turn mobile internet access into a smart service.

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