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The “free” trend

Page 8, By Mats Thorén

Free telecom, based on internet telephony pioneered by the likes of Skype is nothing new. Fresh initiatives from Microsoft and new approaches such as Voixio’s Flash-based system indicate that integrated communications are set to expand into the mainstream.

Voixio in the UK has developed an internet telephony system that eliminates the need to download a separate application for making calls by employing Adobe Flash.

Talkster, headquartered in Toronto, Canada, provides free long-distance, international, and conference calls from cell phones, landlines, computers, or VoIP phones. No registration or credit card is required and callers won’t need any new software or downloads to use the service. A short advertisement or special personalized offer covers the cost of each call.

Much-discussed Blyk was launched in September 2007 in the UK and describes itself as a pan-European free mobile operator, funded by advertising. Blyk buys wireless services from an existing operator and resells them under the Blyk brand. Or gives them away to the users and instead charges the advertisers.

Mosh Mobile offers a similar service in the US, though users are asked to reply to sponsored messages. On its homepage, Mosh announces that “up to three times a day we may open a dialogue with one of our sponsors. You may receive one sentence surveys to help us get to know our members better, you may get exciting videos delivered to your phone about things you like, you may get free downloadable games from our sponsors, coupons you can present to stores for discounts and much more. Each day if you complete the actions you get more free service. Want even more — you can request more dialogues and receive even more service credit to use.”

Another variant on the free-calls theme is Pumbby, a Brussels-based operation. With Pumbby, users get paid to watch ads regardless of which mobile network they subscribe to. When they sign up on the homepage, they indicate which network they use and how many ads they are willing to receive each day, out of a maximum of 10.

California-based Jaxtr was launched in March 2007 and calls itself the world’s largest social communications company. Jaxtr works with any mobile or landline phone. When members add their Jaxtr link to their e-mail signature, friends and family can call them from their regular phones from anywhere in the world without paying international toll charges. They simply click on the member’s Jaxtr link to generate a local number in their country.

Another California start-up, Pudding Media, is offering an ad-supported VoIP service that is free if users allow Pudding to monitor their calls. Voice calls are scanned by a machine that pulls keywords out of conversations in order to generate relevant ads.

According to the company: “When certain keywords are spoken, interesting and timely, news, entertainment, and offers are displayed on the screen.”

The idea is to enable brands to display contextually relevant information and offers in real time to consumers. This in turn will allow any communications provider — mobile carrier, internet telephony service, even web publisher — to offer new ad-supported calling plans.

Ad-funded content offers new ways of reaching audiences, along with the potential to generate new business models within the industry. Orange UK is running a trial of new advertisement-supported content on its mobile internet platform, Orange World.

Some 800,000 of Orange’s 15.6 million mobile customers have been given the option to download a variety of music content (urban, pop, rock and dance) to their mobile handsets for free or for half price. This may be the largest trial of its kind in the UK.

Will they pay for it?

Page 12, By Erik Kruse and Jan Unkuri

The “Web 2.0 age” is the most important factor for take-up and use of services in this article’s proposed business model, which is based on consumer research conducted in the UK, Hong Kong, and Sweden during late 2007.

The internet can be seen as a “macro” habitat, where the computers linked up are the nodes of the habitat, as well as be analyzed as an application. In reality, the internet accommodates a number of applications within its habitat, which people use to gain access to other goods, services, and content.

Applications are crucial for consumers gaining access to the world. Their need for access implies that consumers are willing to pay for getting, ensuring, and controlling it. This willingness is based on several drivers; in particular, interest, urgency, convenience, and peer pressure.

Access to other people, various types of content, and different habitats makes it possible for consumers to carry out their lives in the real world, as well as in the digital arena. The need for it is often urgent, which ramps up consumers’ willingness to pay. When they are out of application alternatives, they are usually willing to choose one that costs money to make sure their access isn’t compromised.

Because access is such a crucial part of people’s lives, it should be ever present for consumers. For that reason, many consumers are willing to pay for convenience.

Peer pressure is another reason consumers will pay for access. It strengthens an individual’s consciousness about being left out.

Their willingness to spend hours in habitats can be perceived as a willingness to pay for residing in the habitats driven by interest. But although the willingness to socialize with other people is a strong driver for usage of habitats, it doesn’t automatically convey a willingness to pay. Habitats belong to a category of digital products and services that consumers are not willing to pay for other than indirectly.

Most consumers have an interest in some kind of content, and whenever that interest is great enough, it becomes a distinct want that drives willingness to pay for getting that content. The interest driver is predominant in the content category and to a lesser degree for other drivers, such as no-alternative, urgency, and convenience. In general, there’s a willingness to pay for any kind of content that works well on a mobile phone.

When a content category is new to the mobile phone and therefore cool and exiting to experience in a new device, novelty drives willingness to pay. This is currently true for the subcategory TV/film. And status is a driver in the subcategory content for personalization.

Summarizing the opinions from our consumer groups, we found three basic requirements for a business model built on charging. It must be fair, transparent, and consumer controlled.

Take-up is one thing; willingness to pay is another. Before consumers are ready to pay, drivers such as interest, no alternative, urgency, convenience, peer pressure, novelty, and status have to override the expectation that products and services in the digital arena are usually free, or at least included in a subscription or network access fee.

There is always a right price – here is how you can find it

Page 20, By Thomas Wavelet and Pablo Gomez

This article addresses two key questions for all mobile telecom operators: Can price elasticity for mobile voice communication be estimated? And using this analysis, can the optimum price per minute — where profits are maximized — be estimated?

By analyzing publicly available financial information from various operators around the world, we were able to demonstrate empirically that optimal pricing toward profit maximization can be determined.

Given a wireless network without capacity restrictions, the optimal price for a minute of use (MoU) is found where the marginal cost equals the marginal revenue — the price point where an additional minute does not generate any additional marginal profit. At such a level, profits are maximized.

Our analysis demonstrates the impact of economies of scale in the telecom industry. With all other things being equal, operators have an inherent interest in increasing traffic in their networks, because the cost per minute decreases substantially over time.

We believe that this analysis is a powerful management tool for all operators, given that voice traffic represents the lion's share of their revenues. Conducting such an analysis provides valuable input for setting optimal pricing.

Changes in pricing strategy are one of the most visible commercial actions, immediately transparent in the marketplace. They should therefore be carefully considered, after exhaustive internal and external analyses, in order to avoid creating a negative financial impact over the long term. When prices have been lowered, there is no coming back!

Key points to keep in mind when implementing such an approach:

- Alter price per minute in small increments. Price elasticity constantly changes as price evolves, so gauge the impact of per-minute changes on price elasticity after each change.
- Consider bundling and on-network, off-network, peak/nonpeak tariff schedules. These will make changes to pricing strategy less transparent to competitors.
- While our analysis was performed using a blended price-per-minute methodology, it should ideally reflect "unique service" prices, such as price per prepaid minute for local calls.
- The decision to lower prices might have a positive impact on traffic and create a need for additional network capital expenditure, depending on network loads.

TV gets personal – and this means new business

Page 24, By Alan Delaney

IPTV has enabled telecom companies to gatecrash the Pay TV industry. Today subscriber numbers are modest, but they are growing fast. IMS Research is predicting over 52 million IPTV Pay TV subscriptions worldwide by 2012, and MRG forecasts 72.6 million global IPTV subscribers by 2011.

Telcos are building the first new Pay TV platform of the post-digital, post-internet, post-broadband, post-wireless age. Perhaps part of the reason IPTV has attracted so much interest is that telcos have an unprecedented opportunity to apply the lessons of the past 10 years, and incorporate changes in people's consumption patterns — not least the desire for content on demand combined with content mobility.

The television and VOD services being deployed today should be viewed as version 1.0 of IPTV. There will be several more generations as telecom operators add layers of communications/entertainment convergence, personalization, and cross-network mobility, irrespective of how cable and satellite evolve their networks and services around an increasingly IP-centric future.

When used over a traditional telco's copper network (traditionally in the last mile bottleneck), IPTV enables high-definition TV alongside multiple streams of standard-definition TV, making multiroom TV and multi-channel digital video recording a reality.

The video headend serves as the foundation for delivering IPTV content. One thing all telecom services of the future will have in common is content, especially video content, whether it is delivered to the home, to mobile phones, or into cars, and regardless of the access network. Most content will eventually be made available on demand, either in private IPTV networks or on public internet video portals. Original content must be as high-quality as possible, because it's the source from which compressed video gets created and set for the correct screen resolution. IPTV will become the entertainment element of a unified home service that includes communications (wireless telephony, electronic messaging, instant messaging, intercom, voice/video conferencing) and security (in-home monitoring, intrusion detection, remote video surveillance). The network operator will provide and manage home service applications.

In this converged environment, subscribers will be able to log into the IPTV service to enjoy their personal settings, including preselected RSS feeds and tickers. They will be able to see their IPTV buddies online and direct their friends to the channel they are watching, then start to discuss the program via instant messaging, texts, or voice calls.

Although all of this will be possible, network operators must first consider the many applications and services that have yet to be invented and build platforms that, above everything, are adaptable, for there really is no template for IPTV. Beyond the current VOD and television services, we are entering uncharted waters.

Eventually, when all content delivery involves IPTV, and all major Pay TV providers are bundled-service providers, and when everyone is two-way enabled and interactive, new applications, the speed with which they can be deployed, and the cost of delivering them will set operators apart from their rivals.

Can telecom save the planet?

Page 30, By Matilda G Gustafsson, Anna Kramers, Jens Malmodin

Recent years have seen increasing certainty about the causes of global warming, especially greenhouse gases. Four business sectors — building, travel, transport, and food (where meat production is most important) — are responsible for about three-quarters of global energy consumption and CO_2-equivalent (CO_2e) emissions.

Telecom can't save the planet by itself, but ICT is one of the keys to a future low-carbon world. We believe that 5–20 percent is a reasonable reduction potential for ICT in the short to medium term. Recent studies have estimated that the ICT sector's global warming share is 2 percent, measured as direct CO_2 emissions. Mobile telecom's share is 0.2 percent, and fixed telecom's share, including broadband, is 0.3 percent. PCs and the internet (especially data centers) are the most significant contributors to global warming in the ICT sector.

The ICT sector comprises mobile and fixed telecom (including broadband), and PCs and data centers (including computer networks). In this report ICT does not include Entertainment & Media (E&M), defined as TVs with peripherals, printers, copiers, the paper industry, and a whole range of consumer electronics. The E&M sector has about 1.5 times greater CO_2 emissions than the ICT sector.

Research reports regarding ICT and sustainability show the following reduction/substitution potential in percentage (%) for short (and medium) terms:

- Flexi-working — 2% (4%), large potential
- Virtual presence — 1% (2%), medium potential (only including business travel)
- Electronic commerce — 2% (4%), large potential
- Dematerialization — 0–5% (10%), very large potential
- Services — 2%– 4%, mixed potential
- Intelligent systems (telematics) — 5% (10%), large potential

As consumers, we have many opportunities to use the mobile phone to adopt a more sustainable lifestyle. These include virtual meetings and video conferencing; using the phone's travel planner to plan the most efficient routes, calculate CO_2 emissions for different trips, or locate the nearest vehicle in your carpool; subscribing to a service that delivers provisions to your home; linking to a product's source by taking a photo of the barcode to learn information about the producer's methods and CO_2 emissions; and remotely controlling home appliances and monitoring the home's energy and water consumption.

McKinsey's 2008 survey shows that CEOs all over the world foresee that environmental issues, including climate change, will carry much greater importance. According to 46 percent of the CEOs surveyed, the environment is one of the top three issues that will have the greatest impact on their company in the coming five years.

For some industries the business logistics will change; for some industries the energy prices might change the value chain (example: truck to boat) or force a focus on energy efficiency, putting pressure on suppliers and transporters and providing incentives to customers and employees to act in a climate-smart way. Can you reduce the material in use, reuse some of it, and recycle? Innovation is required in the areas of business opportunities, products, material use, processes, and business models.

General recommendations are:

- Understand whether it is enough to fine-tune existing ways of working or to do things differently.
- Be certain that you understand your industry's future cost drivers. Will energy supply be one?
- Ensure that the change within your company goes hand in hand with the perception buildup of your company's green approach.
- Do your homework and "walk the talk" in order to be trustworthy in the market.
- Seize all opportunities to be cost effective, find new business opportunities, reduce your company's greenhouse emissions, and attract employees and investors.

Improving public safety

Page 40, By Ritva Svenningsson

The communication requirements that arise from the wide scope of national security and public safety operations do not match what is offered by the radio capabilities of voice and text messages normally used by these organizations. The question is how to fill this gap in a financially sound and operationally safe way while maintaining confidentiality and keeping the system easy to use.

Tapping commercial technologies and open standards would give emergency professionals continuous access to the latest in services and applications at the same pace as ordinary consumers. Open standards create a broad marketplace for many commercial suppliers of networks, services, and applications. This has resulted in communication networks that connect across the world: interoperability on a global scale.

A broad market will continuously develop improvements, eliminating the risk of being stuck with a single supplier and going through long and painful negotiations for every upgrade of the legacy system to, for instance, mobile broadband.

The technology is here to enable professional communities to use mobile broadband in public networks for their operations. Sometimes authorities use public networks as they are, depending on the purpose. Authorities can also act as virtual network operators or buy the communication capabilities as managed services from a public operator if they need to ensure tailored features and applications or even control the core network. In addition, the network can be connected to other operators' networks through wholesale roaming agreements — reaching national and international networks globally.

We have seen the beginning of how the national security and public safety community will use the capabilities of commercial technologies and mobile broadband. Soon we will see a whole new market opening up for commercial network operators.

At last, they are beginning to get the message

Page 44, By Graham Finnie

Are next-generation telcos emerging that can make the best possible use of next-generation networks?

That was the question *Heavy Reading* posed in a large-scale survey of telcos and suppliers that was the basis for the report, "Reinventing The Telco" And while the survey did not provide a definitive answer, it suggested that telcos are becoming more realistic about their role in the all-IP NGN of the future.

Most big telcos now recognize that the era of big telephony revenues is disappearing fast. Last year, for example, France Telecom lost almost 25 percent of its customers — more than 5 million lines — to competitors who typically offer flat-rate VoIP and do not charge for minutes. Nine out of ten respondents said they did not believe that telephony would survive as a stand-alone service.

Over half of the respondents said that packaged services would be the biggest source of telco revenue by 2012 — typically a triple-play package with a few extras thrown in. But faith in triple play may be misplaced. Competition between flat-rate broadband wireless and wireline packages is growing, and internet access sells on a simple price/bandwidth ratio. Consumers spend less on entertainment than communications. The spread of free user-generated content and over-the-top video provided directly by rights-owners is putting this model under even greater strain.

The truth is that triple play on its own is unlikely to pull telcos out of the current swamp of low growth, no growth, and real decline. In these circumstances, the huge investments going into NGNs look less than prudent. Yet NGNs do have a silver lining, if only telcos can accept that they need to use the transition to NGNs to open up and accept that they can't maintain vertical control of the applications and services that run on these platforms.

The survey suggests that telcos have at last begun to get the message.

It's a long way from perception to execution. Big telcos have, at best, a patchy record when it comes to cooperating with third-party providers, especially web-based providers. However, big telcos are hoping to put things on a more constructive footing by opening up networks, platforms, and resources and then sharing the hoped-for new revenues with those third parties.

Often going under the name of network or applications "enablers," these capabilities include the ability to bill, authorize, and identify customers, as well as security, per-application or per-subscriber quality of service, presence, knowledge about subscriber location or devices, and high-level exposure of call control and other specialized telco software, so that ordinary software developers and even non-technologists can write to telco platforms.

Telcos have an enviable ability to earn revenue from end users — not a strength of the web-based providers, who often give value away in the belief that they can monetize that value later. Could telcos help them do that more effectively?

That is a huge question, and it is perhaps the last great throw of the dice for the world's hugely rich but mightily endangered incumbent telcos.

Network your customers by monetizing the mobile attraction

Page 46, By Giovanni Zappelli and Mario Agati

More and more business sectors are feeling the mobile gravitational pull; among them, public sector and health organizations, large retail companies, media industry, utilities, financial institutions, and transportation agencies. These organizations, for which mobile is becoming more relevant in their value chain, are called "networked enterprises."

Typically a networked enterprise builds its entry into mobile space on solid foundations, including a strong brand, a large captive customer base, efficient distribution channels, cheap promotion, and billing relationship with its customers. It aims at establishing a business advantage by using mobility as part of its value chain, whether it is extending its product offering, seeking to increase customer fidelity, offering enhanced payment methods, strengthening its brand, or providing more innovative services.

The classic trajectory followed by networked enterprises is the Mobile Virtual Network Operator (MVNO) path, with its continuum of variations and specialization based on the amount of virtualization achieved.

In evolved markets, an alternative role to the MVNO is to become a Mobile Networked Enterprise (MNE). In this case, the networked enterprise could take the "cross-operator" trajectory and become an MNE by refraining from SIM ownership; striking agreements with incumbent operators to leverage their network capabilities; and addressing its core customer base with cross-operator programs or services.

The new services would be a mix-and-mash of network services and core services. For example, a large retailer might combine identity and location information to give promotions based on where the customer is, and his or her purchasing history and preferences. In the case of tourism, the industry is cross-operator by nature and many interesting services can be mashed with network capabilities. Railway service companies would update train schedules based on the trains' real locations, and provide m-ticketing, express reservations, and personalized offerings. Local and central public administration would extend their e-government services, reaching virtually any citizen with a mobile phone.

Further exploration of the MNE model for cross-operator service deployment shows that ecosystem reconfigurations are needed in order for this market to flourish.

The variety of capabilities and services calls for a transformation from the current vertical integration model (such as when selling ringtones) toward an independent, industrialized, white-label service broker. The service broker would standardize network service interfaces and make them available to a networked enterprise working with multiple operators' services.

This would, in the long run, create a market for brokered capabilities, in which each transaction has a value to the mobile operator at market prices.

The characteristics of this future configuration, focusing on the main stakeholders — users, mobile operators, and networked enterprises — show that end-users would gain a wider selection and personalization of services, eventually at lower price; mobile operators would get traffic boost, monetization of their (latent) network assets, and offsetting the success of competing (internet-based or satellite-based) models; and networked enterprises would powerfully address their cross-operator customer base.

Mobile mass-adoption of these services is still to come, owing to technology and fragmentation issues. Nevertheless, given the speed and the omnivorous nature of the internet's open business model and fast deployments, it could well be that new, powerful forces will determine the future balance.

Proving that telecom spells GROWTH

Page 52, By Johan Kwickström

Professor Leonard Waverman of London Business School has defined the relationship between telecoms and economic growth: when mobile penetration in a country increases by 10 percent, economic growth rates increase by 0.6 percent over time. And his study finds that the growth effect of mobile communications is twice as large in emerging markets as in mature markets.

His research has been mainly about

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the effects of voice telecommunications. "Broadband will probably be less personal and more business oriented. In the beginning, it will be more a business tool for the early adopters. Importantly, it will drive the internet in emerging economies. Eventually it will also become an entertainment device, as it is in developed markets."

He feels that regulators should only be responsible for setting the level playing field — liberalizing the telecom sector, allowing competition, providing licenses and the appropriate framework from which players can operate.

Flat-rate packages for mobile broadband will come, but with limits. "That's because even on the internet they are finding that they must start to have limits, because you don't want somebody paying USD 3 per month and downloading full-length videos to their mobile phone. That is going to kill the business."

He is not a great lover of small experiments. Rather, he would like to see a telemedicine service that's running for five years in a village. "Don't leave too soon" is his message.

Nor does he like experiments if that is all that they are: like a short-time showcase. Good examples of good experiments are the Millennium Villages in Sub-Saharan Africa. "Aid or charity has certainly been misused in the past when it's been thrown into places where it shouldn't have been. But when used properly it is important and means a lot — it makes a great difference. I say we need both."

Corporate responsibility is a good way of ensuring, or at least creating, possibilities for the latter. As a company, you can concentrate on maximizing short-term profit and then get thrown out of the country, which is not what you want. The long-term perspective is the way to go.

Waverman's current research is focused on measuring the governance of telecom regulators – regulation is crucial and we need to showcase effective and ineffective regulation.

How to build growth in emerging markets

Page 56, By Rachel Ooi

In emerging markets they know how to make money from customers who have practically no money at all. That's a feat in itself, but not enough. You also need to look beyond short-term profits. Let's look closer at how this can be done.

Low-disposable-income customers, people with USD 5 or less to spend per day, are the mainstream of Southeast Asia's emerging and high-growth markets. Operators' EBITDA is astonishing, with some at 60 percent or greater, as compared to 30–40 percent for Western operators.

According to Portio Research, the Asia Pacific region is estimated to account for 65 percent (980 million) of the global net additions from 2007 to 2011. This article focuses on the Southeast Asia market as a dynamic illustration, where much will apply to similar emerging markets in the rest of the world.

Mobile users are usually early adopters of new phones and services and are receptive to technology and innovation, which indicates higher interest in advanced services than commonly found in developed markets. Advanced users, however, contribute only 5–20 percent to operator revenues.

Though low-income, mainstream customers are central to the mobile business in emerging markets, high-end or advanced users can provide a stable source of revenue to help mitigate the volatility of the low-end prepaid private market. You need to understand both the mainstream and the advanced-user segments in order to achieve profit equilibrium.

Opportunity exists to not only harvest the mobile communication needs, but also to expand growth by connecting the unconnected in the emerging market, to truly shape the economics of the developing economy, quality of life, and the economic pillars. There are many cases where operators do not just play a traditional role but look beyond it and act as innovative service providers.

Operators have a chance to shape and expand consumers' share-of-wallet for communications from 5–10 percent to 20 percent and beyond, through financial, retail, and other services. This is what I call "leveraged revenues." Empowering services are important for addressing the user's fundamental needs, which can be communications or something else. Many traditional operators fail to realize that for this group of users mobile communication isn't just communication.

But if an operator uses empowering services solely to attract more subscribers, average revenue per user (ARPU) will inevitably decrease and become nonsustainable. This is because empowering services are easily substituted as a commodity by competitors. Besides, ARPU as one of many key performance indicators does not reflect the true state of an operator's business growth and may not be meaningful in the emerging market.

Operators must realize that services such as village phones, credit sharing, and low-denomination top-up are commodity services that facilitate communications. To expand new-subscriber share-of-wallet spending beyond communication, operators must further explore this group's needs.

Being insensitive or irrelevant to customers' needs is dangerous in any market but especially in emerging markets that are generally dynamic and volatile. Here, the operator's role is often more challenging than is perceived, yet the rewards are greater. They are successfully evolving this role beyond merely providing communications to also becoming an integral and indispensable part of private life, social life, and their countries' economic development.