

# Rethinking mobile communication: It's not about bit speed

Operators are playing catch-up with the internet world. They might as well forget it, and take lessons in market economics instead. That is the advice of Bengt Nordström, a leading figure in the GSM world.



**MEASURED IN TERMS OF IP TRAFFIC** on the global network, the internet is actually expanding at a rate of 100 percent per year, whereas growth for the mobile industry is sinking and is closer to a mere 5 percent. Even with the exception of emerging markets, it seems like the mobile industry is suffering from a serious growth problem.

How do you catch up with something that is growing so quickly it doubles in size each year?

After 25 years of pioneering work in telecom services and first-hand experience of fostering mobile businesses in different parts of the world, Bengt Nordström, chief strategy officer at inCode (a VeriSign company), has a harsh answer: Don't even try.

Nordström says the mobile industry also has an image problem, because it used to be the exciting future, the "cool" industry setting the agenda for the latest in lifestyles and attracting the young. It also attracted the investment community, where a new sense of "cool" is now spreading, although with quite a different connotation. No wonder then that the mobile world is looking enviously at broadband and is incorporating this term into nearly every statement about its future strategies.

"We in the mobile business often have a very ambiguous relationship with the term broadband," Nordström says. "Broadband is a technical term, implying data speed and how to bring it to the customer. If you instead use the word 'internet,' it becomes quite clear that there is much more growth, development and innovation in the ecosystem of the internet than in the mobile industry's."

## Success has made us blind

The mobile industry is in a way a victim of its own success, he argues.

"We are so used to high growth and attracting the youth segment that sometimes it makes us blind to what is really happening. We have failed to realize that young people are really not very mobile-dependent. Sure, they use their mobiles a lot, but the real change in behavior is related to the internet – their broadband addiction. They spend a lot more time with that.

"Just ask yourself, how much more do I use the mobile now,

compared with 10 years ago? I have asked colleagues and operators about this and they say, maybe twice as much, including the time spent on voice, SMS, WAP and so on. That's not much compared with how much more time we spend on the internet where we have probably increased our time tenfold.

"So we in the mobile industry try to analyze this and we fall into the trap of the technical mindset. We think it is about data speeds, throughput, how to get on an equal footing technically. So the solution is to fix that speed problem. The whole development of 3G was in itself a result of that kind of thinking."

Nordström says the drivers were anxiety and anticipation over the internet – the fear that something big was coming and that the mobile industry did not have anything to match. The notion was that if it could only jump on the internet train, it would have fantastic future growth.

## Separate access and content

"I think it is fair to say that the current industrial track for mobile business has run its course. Surely, after trying hard for years, by now we have proved to ourselves that we are not good at creating growth beyond voice and messaging services.

"We must ask ourselves, why is the internet growing like this?" Nordström says. "And this is where it is beginning to get interesting."

The internet's ecosystem has a complete separation between access and content, he explains. In terms of access, consumers buy a specified number of megabits per second and that's all they buy. All the content is provided by independent players. There is no relation between the internet provider and the content, service and application providers.

"It is even stronger than that. The very vastness and richness of the internet owes to the fact that there is a clear separation between access and content, and that the content providers are completely independent of the access providers."

And behind this fact lies the reason why the distance between consumers and innovators – the people who develop content for the internet – is much shorter than in the mobile world. Nordström takes Voice over IP (VoIP) as a case in point.

## About Bengt Nordström

**Bengt Nordström** was co-founder and CEO of Northstream AB, a Stockholm-based consulting company acquired by inCode in late 2005. His career started in 1983 at Ericsson, where he managed telecommunications projects in Africa, China and the United Kingdom. At Comviq GSM AB in Sweden, he led the build-out of one of the first commercial GSM networks in Europe. In 1992, Nordström was appointed to lead a consulting group for Comviq's parent company, Kinnevik. Later, Nordström served as CTO and executive director at Smartone in Hong Kong. Nordström has been active in the GSM Association, serving as an executive committee member and chairman of the Asia-Pacific Interest Group. A frequent conference speaker and media spokesperson, Nordström is a board member of several wireless companies.

“When VoIP came along, we demanded that it must be standardized and approved by all the standards bodies. We naturally like this way of working because this is how we made mobile a successful business, allowing us to use the same phone all over the world and so on. But it also means extremely long time-to-market – too long.

“Only three years ago, telecom experts would give a thousand reasons as to why Skype would not work. But Skype has quickly gained considerable market share in international traffic. Today, if I use Skype on my laptop to call colleagues in the US, sound quality is better than what I get using the mobile.”

He points to the obstacles facing an entrepreneur in the telecom world. In the mobile business, he is forced to go through the operator middle-man, the operator's entire organization, to avoid internal competition and so on. Negotiating to get your client software into Nokia or Sony Ericsson phones, for instance, is not an easy process. By contrast, the internet entrepreneur reaches the consumer without go-betweens, can launch on a small budget, and gets tested directly on the market. He gets an immediate response and can then move forward and get venture capital.

“Consumer participation is a key factor,” Nordström says. “More than 60 percent of all internet traffic is file-sharing, content that is spread from user to user. Skype is not the result of huge advertising campaigns, but rather of users who wanted low-cost telephony and spread this news among themselves.

### Emulate internet's ecosystem

“What we see here looks like the difference between a market economy and a planned economy. The element of creative destruction is very much present. Netscape came up with the first working browser, then Microsoft decided this was important and took center stage. Still, years later, there is room for Firefox to launch a better browser and quickly gain in



## ❖ ...It's not about bit speed

popularity. There is enormous competitive pressure and innovation is the very strength of the internet. To solve the mobile growth problem, we must take the best from the internet and emulate its ecosystem.”

Nordström feels that the way IP Multimedia Subsystem (IMS) is being introduced proves that telecom players fail to understand the market.

“We still don't really know what IMS will be used for. We have a few examples such as video sharing, see-what-I-see, push-to-talk and VoIP. But each time we think about what particular service IMS should be used for, we have thought of the wrong thing. Instead, the question should be: how do we create an IMS ecosystem that is interesting enough to appeal to entrepreneurs and innovators?”

The usual argument against letting everyone do their own thing on telecom networks is that it would not work – or at least not work well enough. To that, Nordström replies that if quality of service, security and regulatory requirements were as important as the telecom industry says they are, then the internet would not have grown the way it has.

### **One big step at a time**

“We discuss these values often, but the internet world obviously doesn't care. It is very important to recognize that the roots of the industry are in very intimate cooperation between governments, vendors and operators. In a regulated world, nobody ever asked about cost, and alternatives were not been offered to anyone, really, until the 1980s.

“I am a GSM man myself, and I humbly recognize that I owe my relative success to this industry, but the kind of technology it produces is military-grade and accessible everywhere. It has been decided that this is the standard that has to be met. But if it could come cheaper, most people would choose that.”

Ten years ago the discussion started about the need for more IP addresses, moving the internet from IPv4 to IPv6. Nothing has happened yet, which is a good thing in Nordström's eyes.

### **Bengt Nordstrom's insights to better mobile growth**

- “Give up the ambition to provide services or content, except for voice and messaging. This applies to both operators and telecom vendors. Separate access and services; stop being the go-between that speaks for the consumer.”
- “Use this separation to unleash the innovative powers that are already out there on the market, all the millions of sometimes crazy ideas about what the technology should be used for. Let those forces decide.”
- “Don't single-mindedly believe that increased data speeds will solve the problems. We still don't have a good answer to how we will fill up the 3G networks. Yet we throw ourselves after higher-speed technologies such as Long-Term Evolution and WiMAX. This proves that we are stuck with the notion that if we only get higher data speeds, all our problems will be solved.”

“If the telecom industry had been in charge, we would have forced business to implement IPv6, with huge investments and probably bankruptcies as a result. We always demand the next generation – and 3G too is based on this thinking. When 3G was introduced, we had in fact a great deal of unused potential in GSM, but the telecom industry always chooses to take these big consolidated steps.”

Today there seems to be an understanding that the telecom industry should not try to create its own internet-like solutions, but rather rely on and profit from strong brands and the knowledge they represent. Partnerships between vendors, operators and media companies have become the norm.

“There is nothing wrong in that,” concedes Nordström, “because partnerships will probably also be needed. But YouTube and Skype, for instance, are not the results of any collaborative agreement between giants. It is remarkable how many of these new internet phenomena have entrepreneurial roots.”

And he gives a striking example: YouTube alone generated as much traffic in 2006 as the whole of the internet in 2000 – and this from a company nobody had heard of only two years ago.

Changing the operator role towards what is sometimes condescendingly referred to as the “bit-pipe provider” role is an old discussion and it has always been difficult, Nordström says.

### **There is value in the pipe**

“I wish we could find a better sounding word. Why not value pipe or smart pipe? I think it is definitely a profitable and very exciting role to play. And can we solve the growth problem in the mobile business without it? I don't think so.”

He points out that frequency space is still a limitation. In a market where you may have hundreds of wireline internet service providers, there is normally room for only three or four mobile service providers. That alone, Nordström argues, should make the bit-pipe role a much more interesting part to play for mobile operators than for their wireline counterparts. Whether operators choose to change their roles or not, the internet has already created a quite different business environment.

“The dynamism of the internet market has made Cisco the world's largest communications equipment provider. And it is noteworthy that 75 percent of its customers are enterprise customers. Today, it is not only operators that build networks, and that should also send a very strong signal.

“The whole telecom industry still suffers from the lingering legacy of the monopoly days. Each time a price is artificially set, you invite unwanted behavior. Interconnect fees and roaming fees seriously limit the market. Today, only 1 percent of global data traffic is mobile. The lesson from broadband is that it could have been a hundred times more. At the end of the day, it is a question of market economics.

“Even if you want to change, the mindset and industry roots make it difficult. Most of the world's leading telecom vendors have little visibility of where the future growth really lies.”

**Mats Thorén**