

Frost & Sullivan Movers & Shakers Interview:
Mark Foster, CTO, NeuStar



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NeuStar, Inc. (NYSE: NSR) is a provider of essential clearinghouse and directory services to the global communications and Internet industry. On November 27, 2006, NeuStar announced that it had acquired Followap, Inc., a UK-based provider of next-generation communications solutions for network operators that delivers interoperability between operators and Internet portals in five different functional areas: instant messaging, presence, multimedia gateways, inter-carrier messaging hubs, and services for handset clients.

Frost & Sullivan spoke with **Mark Foster**, Senior Vice President and Chief Technology Officer at NeuStar, about the Followap acquisition and NeuStar's plans for Mobile IM.

F&S: We believe that the Followap acquisition puts NeuStar right at the core of the next large mobile application market (Mobile IM). Talk about the synergies between the companies.

Mark Foster: Followap is the only mobile messaging gateway that enables interoperability and interworking between mobile operators, internet-based portals, and cable providers. This capability is critical to NeuStar's strategy to promote and facilitate interoperability within the communications industry, making Followap's best-of-breed Next Generation Messaging (NGM) services a natural extension for us.

Followap's NGM services are a natural complement to NeuStar's SIP-IX suite of interoperability product offering and services. NeuStar sees mobile IM as the first real "killer app" driving wide-scale deployment of SIP and IP-based services. Mobile IM is a vital upgrade of the existing mobile messaging community and services – text messaging, MMS and picture messaging – the technology for which has remained unchanged over the last decade. Mobile IM has to be as ubiquitously interoperable from the outset as text messaging is today. NeuStar is right in the critical path of the industry's plan for launching mobile IM.

F&S: Please comment on the services that Followap currently provides to the market (IM Service Center, Interconnect Platform, and Presence Platform). How do they complement NeuStar's existing solution portfolio?

Mark Foster: Followap has existing customers under contract who are deployed, have infrastructure products operational, and account for almost 400 million subscribers. NeuStar believes that Followap provides the specific application services for mobile IM that will allow our SIP-IX product to become best-of-breed in the mobile IM space.

We look at it as a three-layer food chain, and all three layers are vital if Mobile IM is to become the total business solution the industry needs. The bottom layer is the *application enablement layer* for the infrastructure product, Followap's IMSC product. Most of Followap's customers want Followap to host their IMSC product on their behalf, and that's NeuStar's forte. Followap brings the technology, the service and the existing customers, and NeuStar brings the operational expertise.

The next layer in the food chain above that is the *interoperability layer*. This is where their messaging gateway or hub – the ICP service, as it's called – is critical. Again, much like the IMSC, Followap provides the class-leading product, and NeuStar provides a neutral hubbing service among the leading operators.

The hub itself is critical, but it relies on the vital third layer that sits atop of it. Mobile IM uses telephone numbers as a form of user address, routing messages to mobile phone numbers – no email addresses or screen

names necessary. With the advent of mobile number portability, it's not trivial to ascertain customer data based upon a phone number. We have a directory service called SIP-IX that identifies what mobile network operator serves a particular subscriber, and through what protocol that subscriber can be accessed using IM or SMS. This is critical, because mobile IM needs to be ubiquitous, seamlessly interoperable and backward-compatible to be truly effective.

F&S: Last year at 3GSM, a number of wireless operators made a commitment to support inter-operator compatibility for mobile IM. Please comment on NeuStar's involvement with the development of the core SIP protocol standards used for IM, as well as the interoperability and directory standards.

Mark Foster: With standards work, it's difficult to anticipate what will ultimately gain enough traction for broad-scale adoption. SIP is obviously fundamental; NeuStar has led that charge for six or seven years. We invested substantial effort in leading the SIP SIMPLE working group – especially Jon Peterson's work there – as well as core standards like RFC 3953, which defines the ENUM standard that is the key interoperability technology and standard for accessing our SIP-IX directory. We're very excited to see the mobile industry rally around these standards and technologies as critical rollouts for the mobile messaging environment.

F&S: We believe Inter-portal IM still could very well be the Holy Grail in IM. Currently, inter-operator agreements do not extend to portal partnerships held by each wireless operator. Do you see these issues as inhibitors to broader adoption?

Mark Foster: It's natural for operators to start off with a bilateral model, in which operators have contractual relationships with each portal individually and separate relationships with each other for IM interoperability. But inter-operator agreements don't implicitly facilitate interoperability of Internet portal services between operators. That's a conscious decision by operators: no single operator should be in the position to negotiate an agreement that, through its own pairing arrangements with other operators, could allow it to set market conditions for access by the entire industry for that IM portal. We don't see that as necessarily inhibiting interoperability. Those relationships are already established.

What we have, then, are two flavors of IM: the access to Internet IM, and this mobile hosted IM – or personal IM, as it's defined in GSMA. There is a very strong expectation of convergence of these two, and it's predicted that convergence will occur when the existing agreements the operators have with the IM portal providers are upgraded, thus extending them access to this mobile IM environment. Because that mobile IM environment is fully interoperable, once you allow an Internet portal provider to plug into it through a particular provider, it's very hard to "put the cat back in the bag."

F&S: We believe the current market conditions are similar to the initial market for SMS when internetworking standards were initiated. Please comment on the global adoption of Mobile IM. In which areas do you expect to see most traction in the near term? What are the key drivers and restraints geographically?

Mark Foster: The GSM flavor of personal IM is really being driven by the lead operators participating at the strategic level at the GSM Association. Those tend to be mostly the lead European operators. However, we also have interest from the CEOs of leading operators in India and Asia. So we see, in a fairly short-order basis, the market wave starting in Europe and a few months later hitting Asia very actively. Asia is obviously interesting because it represents 60% of today's global messaging market, and we think mobile IM is of special relevance there.

F&S: Does NeuStar have an infrastructure already in place in Asia? Further, does NeuStar have operating services there that it can capitalize on quickly?

Mark Foster: Yes, we have been active with mobile number portability in countries such as Taiwan. We have Internet domain root server hosting relationships with countries such as Taiwan and China. We also have operating partnerships with lead peering providers like Equinix, who has peering locations in Singapore, the Hong Kong Exchange and Japan Exchange. We have partnerships with key facilities and peering providers with which we can get the highest quality, least cost access to our customer networks. Earlier this year, we sold content clearinghouse services to the Bridge Mobile Alliance. The alliance is based in Singapore and consists of eight member operators in Asia that collectively serve about 100 million subscribers. The first service we offered was live coverage of the FIFA World Cup through ESPN.

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