

Learning to serve many masters

As mobile service providers struggle to profit from an open internet environment, their strategies tend to focus on communications and connectivity, as opposed to taking a media-centric view of the market. They must capitalize on parallel market opportunities in a media age with many masters.



THE MOVE INTO MEDIA will cause considerable disruption in the telecoms business as the business models for media, communications and the internet collide. Networks and devices that have essentially been optimized for specific voice telephony and messaging services must evolve to support a wide array of multimedia services and applications. Internet-enabled applications and converged devices lower the barriers for new market entrants and will increase the rate at which innovation occurs. A variety of industries such as media, advertising, retail and healthcare will use next-generation mobile networks to deliver innovative services.

Service providers must position themselves to capitalize on this trend. Their network assets and points of physical presence in the service-delivery ecosystem give them a unique position as service distributors. However, this is of limited value if they continue with a communications-centric (connectivity) approach to the market. Network architectures must become increasingly media-centric. This means they must:

- incorporate advanced distribution architectures that mimic internet solutions offered by companies such as Akamai;
- capitalize on low-cost memory (to distribute caching capabilities throughout the network), on devices (to reduce their peak network-loading requirements) and on local-area base-station technology such as femtocells (to address capacity hotspots economically);
- apply deep packet inspection, advanced policy management and enforcement hierarchies, harvest analytics and subscriber context information to improve user experience; and
- develop business process capabilities that integrate with parallel markets to support independent revenue streams beyond traditional subscriptions.

As mobile service providers invest in next-generation networks,

they are faced with the challenge of simultaneously supporting multiple masters. They must continue to support “best-of-breed” services such as voice telephony, messaging and mobile video, which drive valuable subscription revenues. And they need high-performance infrastructure such as Internet Multimedia Subsystem (IMS), advanced device capabilities and high-availability service-delivery equipment to support these applications. At the same time, service providers must anticipate the emergence of a slew of internet applications being demanded by their subscribers. They cannot afford to implement high-performance, specialized infrastructure to support these applications; rather they must create an efficient service-delivery environment that effectively aggregates and distributes the broad range of internet services and applications. This service-delivery infrastructure is likely to consist of thin-client technology that combines utility akin to internet-browser technology, but includes extensive added value. This includes functions such as personalization, location and service-discovery capabilities that build on early market implements such as Apple’s iPhone.

Worth more than you think

As mobile service providers grapple with profitable business models from an open internet environment, their strategies tend to be focused on communications and connectivity, as opposed to a media- and service-distribution-centric view of the market. I believe that the communications industry tends to underestimate the valuable points of presence and intelligence that they have within their networks, whether it be devices and network infrastructures, or personalized, contextual, subscriber information.

The communications industry also underestimates its value in the context of other parallel markets, in much the same way as the

internet industry underestimated the value of internet search until companies such as Google recognized the massive intrinsic value that could be created with an efficient model that combined it with advertising. Admittedly, we are seeing early mobile advertising implementations, which are certainly a step in the right direction. However, the solutions that are being deployed vastly underutilize the rich subscriber-specific information that can be harvested from the network, and are being implemented with the level of vertical integration we associate with the “best-of-breed” implementation depicted in the figure below.

I believe there are significant opportunities for service providers to leverage the open internet environment with solutions that are vertically integrated into parallel markets, such as in healthcare where the elderly and the ill require continuous or regular monitoring of vital signs.

A service provider could leverage the open internet environment in conjunction with personalized information and integration with a personal sensor network to provide a monitoring service. Other opportunities exist in car navigation systems, video surveillance, secure media distribution and integration with retail brick-and-mortar processes and customer personalization. To implement these solutions efficiently, I believe service providers will implement infrastructure that parallels the internet “mash-up” concept and is anchored in established parallel markets, be it the healthcare, automotive or retail industries.

As technology vendors hone their device and infrastructure strategies they must anticipate and respond to initiatives that will emerge in parallel markets. In particular:

- Device manufacturers must anticipate increased uptake of consumer electronics with embedded communications modules and vertically integrated functionality targeted towards relevant market verticals.
- Media distribution and “over-the-top” infrastructure vendors

will create significant demands for efficient traffic management and hierarchical policy infrastructure. This will place greater strategic importance on edge infrastructure offered by companies such as Cisco, Ericsson Redback and Juniper.

- I expect that residential gateway equipment offered by companies such as Cisco/Scientific Atlanta and Motorola will become a strategic point of presence that can be used to provide connected-home applications such as media, entertainment and healthcare.

Stop being protective

There is a lot at stake as the communications market enters a new age of heightened innovation and collides with the internet and media market. Significant investments are made in next-generation network architectures. As service providers make these investments, they must anticipate and capitalize on emerging market opportunities rather than focusing on protecting unsustainable legacy business models.



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