Pipeline

Knowledge Is Power

Any Service, Anywhere

By Tim Young

The value proposition underlying fixed-mobile convergence has always been compelling, on the surface. Have a single handset, and a single bill. At home or in the office, use that handset on a home network, paying less, given the fact that your voice and data is being passed along by your broadband connection rather than crowding the wireless spectrum. Once you leave the familiar confines of your LAN, seamlessly pick up a wireless signal and carry on with your conversation. Neither you nor your conversation-buddy notice the switch, and you've got a communication device that ties the home and mobile experiences together in a mighty tidy fashion.

There doesn't seem to be anything terribly wrong with that idea. It's a brilliant solution to the problems of the modern communications consumer, right?

Well, that's something we should probably tell a consumer and business market that's never fully climbed on board with FMC.

Setbacks:

It's not that the solutions don't work.

The FMC Alliance; a trade association whose member companies include BT, Belgacom, China Telecom, Korea Telecom, Swisscom, and many others; has been trumpeting the virtues of fixed-

mobile convergence since 2004, and as recently as October 23 issued a press release reporting a successful test of seamless mobility using the IEEE 802.21 standard.

However, there's still reluctance in many markets for consumers to embrace FMC offerings. Femtocells, considered by many to be the key to fixed-mobile convergence adoption, have hardly been flying off of shelves. Perhaps that has to do with the economy, or perhaps that has to do with wireless providers offering all-you-can-talk plans for lower price points, rendering any discussion of cost-savings to be gained from utilizing lower-cost fixed-broadband traffic utterly futile.

(I, for one, have unlimited talk time from my wireless carrier. It's a low-priced loyalty plan that makes it utterly impractical for me to embrace FMC. Then again, I'm also highly unlikely to switch mobile providers, so the 'loyalty' aspect is working. But I digress.)

In the US, conversations from wireless carriers seem far more focused on retaining customers and offering more data plans than pushing FMC.

But that's not the case in every market.

In South Korea, the *Korean Times* reported just a few weeks ago that "Convergence of Fixed, Mobile Phone Services [is] in Full Swing." The report cited the fact that KT and SK Telecom were being joined by LG Telecom in a commitment to offering FMC solutions.

LG Telecom will be absorbing two other of LG's telecom units, and the combined company will be releasing their FMC offerings in January. "The market for mobile groupware, which allows business users to handle e-mail and e-commerce on a single handset, is expanding with significant interest from companies," and LG spokesperson told *The Korea Times*. "And there is no doubt that FMC services will be a key element of the mobile groupware package."

If it's any indication of the fluctuations in corporate policy concerning FMC SK Telecom CEO Jung Man-won issued statements just a week later (covered in a separate report in the same paper) that tempered any sense of his company's bullishness on FMC, somewhat. "A type of Internet telephony service, allowing users to switch between fixed-lines and mobile networks using a single handset," Jung told *The Korea Times*, "can't be the right answer as an alternative cash-cow. As a result, SK Telecom won't strike a merger with its wireless unit SK Broadband for a considerable period of time."

So, even in FMC's boom markets, nothing is guaranteed.

Changing how we look at FMC:

The problem, in many ways, with FMC is that it has been approached, historically, in ways that are promising, glossy, and futuristic, but entirely too complicated. BT Fusion and other similar services tanked because, in part, they were thought of by many consumers as a solution in search of a problem. Talking at home or in the office for little or no cost is an attractive proposition, but when users are socialized to pay for minutes, have plentiful VoIP solutions at their disposal (including ultra-low-cost offerings like Skype), and are generally wary of purchases of services or hardware that they find to be entirely unnecessary, they won't bite.

There is an FMC approach that requires minimal hardware/software and will become easier to implement with every new smartphone that ships. UMA/GAN (Unlicensed Mobile Access is the brand name, Generic Access Network is the… well… generic name) is an example of a system that incorporates a seamless handoff between WLANs and WANs using a GSM/WiFi dual mode handset.

Given that some estimates number the volume of WiFi-enabled smartphones shipped in 2009 to be over 100 million, the major hardware requirement for UMA/GAN is already in place. It could, ostensibly, mean that femtocells truly are irrelevant and that WiFi is all the answer users need for FMC.

(It should be mentioned that BT Fusion did eventually embrace WiFi, but consumer perceptions had already been formed. I don't know therefore, that their poor results with Fusion are typical.)

The Off-loading Perspective:

Let's look at the issue of FMC from a slightly different angle.

On the wireless side, data capacity is at risk of being strained to the breaking point by the massive amounts of data that can be consumed by modern smartphones and wireless-enabled laptops/netbooks (which can consume up to 450x the amount of data as a traditional wireless phone).

Even with more spectrum being made available by regulatory agencies, worldwide, and even with more towers being constructed all the time, and even with more efficient 4G technologies becoming more real every day, we're reaching a point where there is simply too much data being squeezed onto the wireless spectrum.

All-you-can-eat voice and data plans are drawing customers, but as more take advantage of these values, we could easily reach a tipping point at which the network becomes virtually unusable to everyone due to sheer overcrowding. By routing some of this massive traffic through WiFi and, therefore, wired networks, some of the strain is taken off of the wireless network. That's a great reason for FMC solutions and any other technology that can spread the strain.

Bringing it all Together:

In the end, it's tough to predict the fate of converged fixed-mobile offerings. At present, it seems that the offerings with the most staying power are those that don't attempt to make too many

sweeping changes to usage patterns, user-experience, or other key elements on the customer end. Less hardware and more flexibility is a good thing. In the end, FMC is probably more of an essential item than many consumers realize. The key for providers is to find ways to make the FMC experience seem as painless for the customer as the mobile experience has come to be.