

# Pipeline

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[www.pipelinepub.com](http://www.pipelinepub.com) Volume 5, Issue 4

## More than Shiny Handsets: The Ups and Downs of Next-Gen Mobile Devices

by Tim Young

Ah yes. That beautiful, classic tale. Phone meets wire. Boy meets phone. Phone ditches wire. Boy and phone go gallivanting around the countryside. Wire doesn't get to come along. The ol' wireless love story.

It's clear that wireless is a major part of telecommunications culture and shows no signs of abating. Culturally, wireless devices have become *de rigueur* for anyone who wasn't around when Sputnik made its first pass around the Earth (and are certainly not shunned by those who were). Logistically, wireless networks can cover emerging markets in which the infrastructure was never constructed or has been unearthed and sold for scrap copper.



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Therefore, wireless is *now*. Newer and better devices are contributing to the creation and spread of a culture that demands high-quality, varied, interesting, and speedy mobile services that continue to grow and change with the needs of users. Next-Gen mobile is expected not just in Tokyo, but in Sao Paulo and Johannesburg and Des Moines.

With that said, let us consider, first of all, the poster child for next-gen devices in the wireless world:

The *Get Smart* shoe phone.

Just kidding.

I'm referring, of course, to the Apple iPhone.

### Setting an Example

There are some lessons to be learned from the experiences of the iPhone thus far.

First of all, any device is only as advanced as its network. The first generation iPhone rolls out, and consumers are psyched and ready to roll. Hot little handset, all aluminum and tempered glass? Check. Sweet touch-based OS of the sort that Mac users have grown to love? Check. Blazing fast data speeds available outside of Wifi range? Nope. Apple launched a next-gen device on a network that couldn't support it in all its glory. Fast-forward a year, and early adopters are burned (for at least the second time, as the earliest of users were awarded for their zeal with a precipitous price drop mere months after they were presented with their sleek communicators) when the 3G iPhone hits shelves offering, to paraphrase the Apple ad campaign, "twice the speed at half the price." Nice.



As other handset manufacturers and service providers rush to match the success of the iPhone, we run the risk of having the telecom equivalent of millions of Maseratis and Ferraris on dirt and gravel roads. Until networks can be suitably equipped to handle the bandwidth needs of new devices, we'll end up with inevitable bottlenecks.

Secondly, there's the issue of activation. Originally, of course, Apple and AT&T were on the cutting edge by completely shifting the paradigm of mobile handset activation by having users take their handsets home, hook them up to their home

computers, and activate the phone through iTunes. However, there was the issue of "jail-breaks." Synchronoss, the company famously awarded with the service activation platform for the iPhone, got burned by the number of users purchasing the iPhone from Apple Stores, and took them away to parts unknown, never activating them via Synchronoss's platform.

And then, once again, the 3G iPhone is unveiled. The faster, cheaper version came with a caveat: They had to be activated in-store. Where did that leave Synchronoss and their in-home activation? Out in the cold. It isn't a part of the in-store 3G iPhone activations, but claims that it is maintaining some of its activation business with AT&T.

Where does this mean for other OSS companies? OSS/BSS professionals are aware that they are bound to be one of the more silent and unappreciated corners of the telecommunications world, generally garnering attention only when they *fail* to perform their expected duties. With the face of telecom constantly shifting, will it be the OSS pros who are left holding the bag? It's a strong possibility. The wireless landscape is far less-well mapped than the traditional telecommunications environment. This may mean rocky times for some OSS/BSS companies. Synchronoss rode the next-gen wireless wave through all of its crests and troughs, and ended up taking a tumble.

Then again, activation isn't nearly so big an issue for providers around the globe. For many providers and many users, SIM cards are far more important than handsets, and the activation process has become super easy. However, for high-end smartphones that companies are trying very hard to keep in-house, considerations must be made.

### **What's the Damage?**

These were two potentially serious missteps: A device unleashed without the network to back it up, and an activation plan that causes boatloads of problems for users and, ultimately, the OSS company behind it. Now, fortunately for Apple, hardcore Mac users display a sense of loyalty that is rarely spotted outside of Radiohead fans and core Barack Obama supporters (in fact, I suspect that a Venn diagram of the three groups might turn up a great deal of overlap... but I digress). Therefore, Apple can weather many of the storms such a slick device could cause.

Google has some of that same cachet. So how will its Android play when T-Mobile releases the first handsets running the OS as early as October? Will it reap the same rewards from its permanent beta culture? The HTC-manufactured handset is said to promise a touch screen and a slide-out keyboard. Sprint is also said to be working on a phone featuring Android. This represents yet another departure from the traditional telecom world undertaken in an attempt to lure the high-ARPU mobile user.

These users have some pretty intense expectations, though. They want rock-solid QoS. It's no secret that millions of users, particularly the under-30 set, forgo landlines altogether. (In fact, for those not paying attention, this has been cited as a factor skewing poll results for the upcoming US Presidential Election. Telephone

polls are typically conducted on landlines. Even if they did take the time to dial up cell phone users, I don't think I know a single person raised on caller ID that ever answers a strange toll-free or "unknown" call.) As a result, voice quality has to be strong on wireless networks. It's expected. However, data connections must be increasingly reliable. New devices are changing habits. Beyond basic email capabilities, mobile web has been largely a fad for many users with no real application. However, the new breed of smartphones actually increases the use of next-gen services by making them more accessible.

Speeds have to increase. How can service providers facilitate that? WiMAX? New applications are essential.

In short, the shift to newer, better, and faster wireless devices and networks is essential, and is not without its trials and pitfalls. This entire issue of Pipeline is dedicated to some of those possibilities and problems, so, as ever, I encourage you to look around. With so many users on the move, telecom professionals must move even faster.

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