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The Evolution of the Smart Phone

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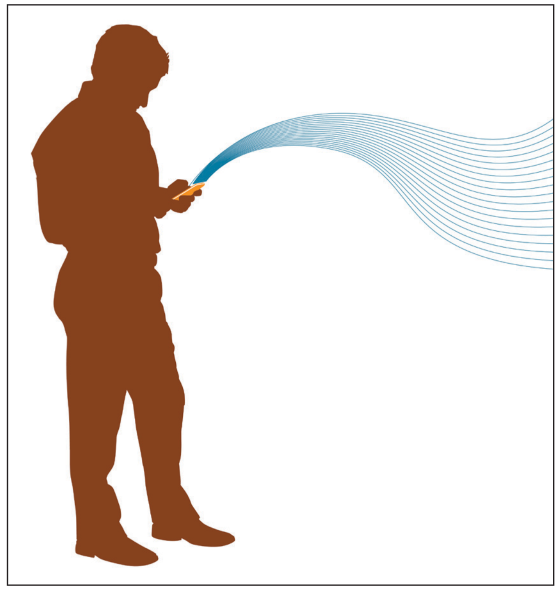

Just a few days ago, it was 12:01am, January 1, 2012. You were ringing in the New Year with loved ones when your mobile phone blinked to life. Calls from close friends and family. Text messages. Facebook messages. “Happy New Year!” “Happy 2012!” “Best Wishes for the year to come!”

It’s that first loving outreach of a year full of possibilities, and it’s become a ritual of sorts for many. But think back to the handset on which you received those messages in 2006. Or 2001. Or 1995. What did those messages look like? Sound like? Did they exist at all?

For all of our grandiose musings on the possibilities of wireless communications enabling ubiquitous information, and for powering new horizons in education, healthcare, and a thousand other noble pursuits, devices remain, for most users, tools for wishing a loved one a Happy New Year.

The key challenge for carriers, it seems, is to please all users, elite and casual, with a slate of phone offerings necessarily limited by pragmatic considerations. Some carriers excel at this, selecting a stable of devices that meet the needs of customers in a way that focuses less on gimmicks and more on innovation. Other carriers struggle.

As we begin this new year, we thought we’d take a little time to explore the present and future of the smartphone market to see if we can get a sense of what to expect in the year to come, and beyond.

How Smart Do Phones Need to Be?

We all know that smartphone take rates have been explosive over the past few years. Fitch Ratings released a report at the end of 2011 noting a smartphone penetration rate in the U.S. market approaching 50%, and O2 Ireland CEO Stephen Shurrock said in May that 4 out of 5 new subscribers to that Telefonica subsidiary took smartphones.

However, even with these growing numbers of devices in consumer hands, user behavior is still mighty conventional. Analysys Mason, in its most recent Connected Consumer Survey, found that only 37% of all wireless subscribers regularly use their devices’ features, other than voice, SMS, and the camera. While they anticipate that this percentage will increase significantly, all of that change will not happen overnight.

That growth is partly hampered by the fact that, take rates aside, many users simply don’t need or want iPhones, Droids, or Blackberries. “The marketplace is split into two,” said Jeff Kagan, an independent wireless industry analyst. “Ordinary handsets are not going away, but their place in the industry is shrinking over time.”

But that shrinkage may not occur this year or next. The Analysys Mason study indicates that 30% of respondents have no intention of buying a smartphone. Existing smartphone users are likely to get another smartphone the next time they upgrade (some 80% of smartphone users responded to that effect. One supposes the remaining 20% will come around once they overcome their frustration at the glass ceiling they've hit on their "Plants vs. Zombies" high score), even though 7% of them report having no use for the phone's additional features.

Meanwhile, 46% of non-smartphone users see no need for a smartphone, and only 31% say their next phone will definitely, or probably, be a smartphone. (You can read the full report, authored by Martin Scott, here.)

So, while smartphones may be the wave of the future, carriers making purchasing decisions should keep in mind that their appeal is not universal. Well-built and easy-to-use handsets that only do a few things, but do them well, will remain a viable choice for certain demographics. My mother, for one. Eventually, however, even she'll likely migrate to a more capable device. That transition just isn't likely to occur in the next few years.

Choices, Choices

However, for smartphone users and carriers alike, the market may have a few new players in 2012.

"Expect Amazon.com to jump into the smartphone space," says Kagan. "They have Apple in their sights. This device will work with their Kindle and cloud and other technologies as time goes forward." Rumors abound that the online retailer, having just beefed up their e-reader lineup to include the Fire tablet, may have the technology exposure, the marketing know-how, and the brand awareness to make the leap into the smartphone space.

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Likewise, Microsoft, whose Windows phones didn't make the splash some industry observers were anticipating in 2011, will double down on the smartphone game. The software powerhouse may have found just the right partner in tremendously important, though ailing, Nokia. Together, the two are releasing the promising Lumia 710, built by Nokia and powered by Microsoft's Windows 7. The phone promises to be a sturdy, well-built, and properly equipped smartphone that offers a feature neither iPhones nor the cream-of-the-crop Android phones can offer: an attractive price-point.

Heavily subsidized by Microsoft, the Lumia 710 creeps into the market at $49, making it an almost-free gateway drug for users who want the full smartphone experience, but who have been affected by the less-than-rosy state of the economy. It's a compelling value proposition, and one that prompted TechCrunch to call 2012, "the year of the WinPho."

Android vs iPhone

Regardless of whether 2012 will belong to that little company from Redmond or not, there's little doubt that Android devices and the iPhone will continue to pull down monster numbers this year. It's hard to say, exactly, whether Team Apple or Team Google can claim 2011 as its own. Both have a case.

On one hand, Android devices, as CBS MoneyWatch's Eric Sherman said it, "crushed" iPhones in 2011. Google claimed 700,000 activations per day as the end of the year approached, which would mean, if that rate continued for a full year, over 250 million activations in 2011. In the process, Sherman estimates that Google made $5 billion in royalties in 2011. Meanwhile, Apple sold just under 105 million iPhones in the 2011 fiscal year (which, granted, ended before the rollout of the iPhone 4S, which certainly drove those numbers down, slightly, as savvy consumers held out for Siri).

However, other estimates indicate that even with more users opting for Android devices than iPhones, the Apple App Store still generates four times as much revenue as the Google Android Market. Furthermore, the iPhone experience is consolidated in Apple's hands, while the Android device market is widely distributed among handset manufacturers and other third parties.

While Android seems to have the edge, based on sheer volume, it's really a bit of a push.

Ebb and Flow

However, the dawning of a new day may mean the end of another. The venerable Blackberry, long the grown-up's smartphone, is on the ropes and may find itself increasingly so as the year wears on. Though RIM is still a massive and important company, a growing number of industry analysts say the embattled device manufacturer is having trouble changing with the times.

"I gave a speech several years ago warning of this coming trouble for RIM," Kagan told Pipeline. "The audience did not believe me. They were still strong and growing. Today it is a different story."

Which is not to say that RIM is out of the game, but the game for RIM will almost definitely change. In 2012, we may see their fortunes either reverse and begin to improve, or see their prospects as an acquisition target grow.

OSS technology can help to ameliorate network strain, but network capacity concerns remain.

The MVNO Impact

There are a number of other trends that will shape the smartphone market in 2012 and beyond.

One has to do with players. Pre-paid providers, from pure plays like Tracfone to pre-paid arms of major carriers, are getting deeper into the smartphone market as more users want the functionality of these new devices without the inflexibility of a post-paid contract.

Furthermore, LightSquared will continue to make waves in 2012, enabling MVNOs to grow in a way that hasn't been encountered before. Their wholesale model is a new feature in the U.S. market, as it sells connectivity as a totally wholesale commodity, as opposed to existing MVNO deals that typically rely on a retail-minus model, forcing MVNOs to make their profits within a very narrow window.

By providing a nationwide all-IP network, LightSquared can charge MVNOs by the MB for usage and free them to create whatever voice and data plans their subscribers desire.

This new network model may be able to teach all carriers something about network capacity and managing network demands. Analysys Mason predicts that, by 2012, the European app market will grow from EUR3.0 billion to EUR3.9 billion, at a compounded annual growth rate of 5%. However, the operator's cut of that spend will decline to less than 30% in that same timeframe.

Hardware Trends

New trends in smartphone design, from crisper (and even flexible) displays to near field communications (NFC), will help to speed adoption of these new and different applications. However, none of that helps the carriers, whose networks will support the burden of these new services.

"Network capacity is a key problem the industry must solve," says Kagan. He notes that short-term solutions may exist, but long-term solutions may be harder to come by. "Verizon is acquiring the cable television spectrum. That will give them breathing room for a few years. AT&T has been struggling for years with wireless data quality and thought acquiring T-Mobile would solve their problems temporarily." With that deal washed away, their core needs remain. "They need the spectrum," Kagan says.

So carriers, as usual, are left with some tough decisions. OSS technology can help to ameliorate network strain by better managing existing network assets and prioritizing traffic. However, network capacity concerns remain. These concerns are exacerbated by the growth in the tablet market, which is a whole other ball of wax. Smartphones put a strain on the network, but at least most people only have one. Throw in tablets, and already heavily

Real-time charging is definitely the direction the industry is headed.

taxed networks may really feel the strain.

Simultaneously, carriers must decide which phones to subsidize and support, and which to leave by the wayside. It's worth remembering, in the meantime, that while the ARPU attraction of smartphone subscribers is hard to resist, not every user is on that page. At least not quite yet.

So enjoy your new year, and enjoy those messages, no matter what device brings them to you.