

Toward a More Relevant Services Model: Building the Porous Telecom Network

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For the longest time I have been puzzled by the number of people I know who carry an iPhone – *and* a mobile phone. That’s right – they look like Batman with multiple devices hanging on their utility belts. The iPhone, after all, *is* a mobile phone. In fact, a large percentage of the people I know who fall into this odd category are Verizon Wireless customers, and since Verizon Wireless is a CDMA company, and the iPhone (at least, for now) only works on GSM networks, they can’t get one from their wireless provider. As I’ve come to understand the real reason for this seemingly bizarre behavior, however, I’ve come to realize that it isn’t bizarre at all – it’s brilliant. And it speaks volumes about the future of the telecommunications industry.

I have a good friend who owns an iPhone (*and* a Samsung mobile). She uses both of them. She recently took me on a tour of her phone’s applications, and I was - enthralled. It’s the only word that suffices. She’s a regulatory consultant and an avid outdoor enthusiast; here’s a partial inventory of the applications on her phone.

- iCompass: An application that turns the iPhone into a very accurate compass, using the built-in GPS and the device’s accelerometer.
- Sit-or-Squat: When the phone is turned on, its built-in GPS quickly determines its (and therefore your) location. Sit-or-Squat uses your location information to quickly note the locations of all public restrooms within one mile of your location, rated on a five-star system by their cleanliness, whether they have a diaper changing table, etc. Laugh if you like, but when you need this application, *you need this application*.
- Tennis-for-Two: A game, reminiscent of the old Pong, which allows two people to swat a tennis ball back and forth on the iPhone screen. Endlessly entertaining.
- Name That Song: Can’t remember who sang it? Hold the iPhone up to the speaker and let it ‘listen.” Within seconds the application will tell you who recorded it, what it’s called, and how to order it from iTunes. Too cool for words.
- ShoeFinder: Love those shoes? Too embarrassed to ask where they were purchased? No problem. Take a picture of them and send it to the ShoeFinder application. Within seconds you’ll not only know who makes them, you’ll know the location of the closest store that has them in stock in your size.
- iMirror: Hold the iPhone up to your face. The camera projects your face on the screen, just like a face mirror.

- Dog whistle: Does it really need an explanation?

As amazing as all of these applications are, one question remained for me to ask her. If you have an iPhone, why do you still carry a separate mobile? Her answer was unexpected. "I carry it because it's better than the phone function on the iPhone. But the applications on my iPhone allow me to customize the relationship I have with the device, which I can't do with my Samsung, so I carry two- one for phone service, which doesn't need much in the way of customization, and the other for the applications that enable my lifestyle." There it was: the iPhone isn't a phone - it's a lifestyle choice. Because of the way the iPhone interfaces with the applications that reside in the network, it offers a new model for customer service: Instead of the user having to adapt to the network, to adapt to whatever the network has to offer, the network adapts to the user. From a customer service perspective, it doesn't get much better than that.

The more I thought about this emerging relationship, the more I realized that this is what Web 2.0, Service-Oriented architecture (SOA) and the Web-Based Services construct are all about. Everybody is moving in this direction: Google does it, Microsoft does it, enterprise application providers are beginning to do it. But the one segment that seems to be a bit behind - and the segment that stands to benefit the most from taking on this model - is the service provider sector.

In the traditional world of network-based applications, the user is forced to accept whatever the network provides. In essence, the user must adapt to the network's limited delivery capabilities. Henry Ford would be proud: "You can have whatever color you like, as long as it's black." The same model emerges here.

With the arrival of the iPhone, a very different user experience emerges. Because of the user's ability to download applications on-demand from what is essentially an endless supply of user-generated applications, the network adapts to the customer - a very different service model indeed. Customer service increases, relevance increases, and a stronger relationship between them results. By and large, the available applications are free-of-charge to the user. So how does this economic model work, if no money changes hands between the producer and the user? The answer is simple, yet profound: many of them are sponsored. Commercial sponsors agree to pay for the development and delivery of the applications, and in many cases click-through advertising adds to the revenue equation. This, of course, is a different revenue model than traditional service providers are accustomed to, but it is real and it is here - and awaiting adoption by

traditional players. This is not a choice: it must become part of the business model of traditional operators.

This model, which falls under an emerging philosophy of service delivery known variously as Web 2.0, Web-Based Services and Service-Oriented Architecture (SOA), is quite elegant. The advantages of this model – which applies equally well to a plethora of businesses, by the way – are numerous. First, it represents an emerging hub-and-spoke ecosystem model that creates relationships that are powerful and inextricably interdependent. The iPhone and iPod, for example, enjoy their remarkable value because of the constellation of capability in the form of applications and services that surround them. Conversely, the services and applications have little value without the iPhone and iPod at the center of the hub.

Second, the model demands a high degree of trust among all members of the ecosystem if it is to succeed. This requirement naturally “weeds out” unsuitable partners who find it difficult to engage in the trust requirement.

Third, the nature of the model makes possible an extraordinary degree of customization by each user, which in turn creates extraordinary value for each individual user. There are no losers in the equation, other than those that are de-selected by the unwavering demand for trust that is placed on the shoulders of all involved.

Because the model relies on the Internet as a fundamental part of its underlying infrastructure, a naturally efficient market emerges. This model is not based on the traditional, well-behaved, linear supply chain that characterizes most businesses. Because of its supply model (the chaos of Open Source development and delivery) and its demand model (pull rather than push, guided by social networking-based recommendations), the market tends to be sloppy and chaotic. The Internet steps in and makes it incredibly efficient, disintermediating layers and functions that have no relevance in the “hyperchain.”

Now let’s take this to the natural next level. Imagine what happens when traditional telecom service providers adopt this model for the delivery of their services. Instead of maintaining the closed, legacy services environment of yore, where a not-invented-here mentality pervades all, they open their networks to third-party developers and begin to host Open Source applications for their enterprise and consumer customers. Instead of the customer having to modify his or her behavior to match the capabilities of the

network, the vast store of applications resident in the network create a customization model that makes it possible for the user to create a relevant relationship with the service provider. Everybody wins: The customer gets what they want because the service provider has become ... a *service provider*.

So ... what will this techno-revolution require? Several things. First, a willingness on the part of the network operator to open the network, making it porous to application developers. Second, operators must agree to partner with other players, recognizing that as far as revenue is concerned, the future holds two options – and *only* two options: They can have some of the money, or none of the money. Third, they must agree to trust the process. This is of paramount importance.

The current challenge that is so vexing to traditional operators is that they must avoid becoming the Internet plumbing in the face of a growing number of companies that offer free access and transport. The way to work through this challenge is to take advantage of their own infrastructure and back-room systems to make the network attractive to third-party developers. And the advantage of doing this? A “telco applications store” would not be limited to a single device like the Apple Store is; it would be compatible with all devices, just as the teaching of IMS have made us aware.

Operators would go about this transformation using a three-stage process. First, they would be required to automate the management of their business processes, customer relationships, subscriber management, pricing, billing, and other people-intensive tasks. Second, they create open APIs on the surface of the network to expose valuable and necessary network resources to third-party developers. Finally, they must develop a monetization scheme that will work for everybody – and this is where the revenue-sharing comes into play.

Consider GSMA’s Aepona-driven OneAPI initiative, an effort on the part of the GSMA to create this model (in principle) for the wireless world. Here is how they describe its role:

“OneAPI will drive innovation by making it significantly easier and faster for developers to build applications that combine the best of the Internet with the best of mobile telephony - and which importantly are interoperable across operators. This will be achieved by providing a universally agreed set of cross-industry network APIs for operators, enabling them to expose valuable network information and

capabilities to third party developers to build Telco 2.0 services and charge for the services through the operator.”

By adopting this philosophical approach to the delivery of services, network operators harness the crowd and take advantage of the immense base of knowledge that it represents. Revolutionary thinking? Absolutely. Is there any other kind?

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