Leaving the Walled Garden:

How Mobile Operators Can Survive in an Open World

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A World of Walled Gardens

Traditionally, mobile devices have been tightly tied to a particular mobile network. Customers had to purchase the handset that was associated with the network, and vice versa; the choice of network provider drove the choice of devices available. This model was particularly strong in the CDMA world, where the lack of a SIM card made it impossible to switch to another network with the same device.

All devices had to be approved by the provider through a long, arduous process before they were permitted on the carrier's network. It was virtually impossible for customers to use devices of their choice on the network.

Historically, mobile operators benefited from this tight handset linkage to the network:

Brand Identification: Consumers tended to associate the device with the carrier's brand that appeared on every handset, rather than with the actual manufacturer.

Switching Costs: Things like contracts, losing address books, and initial device investment made consumers hesitate before switching to another carrier.

Product Differentiation: Given their market power, mobile operators struck exclusive deals with manufacturers for hot, differentiated devices like the iPhone and RAZR.

New Revenue Sources: Device-based software for walled-garden data services allowed new, semi-monopolistic operators to sell high-margin products like ringtones, games, and wallpaper.

It's no surprise that mobile operators did all they could to perpetuate this world. Heavily subsidized handsets created a real disincentive to customers buying their own. Why would you pay hundreds of dollars for your own device when the operator was willing to buy it for you? In addition, operators offered attractive service plans if customers committed to long-term contracts.

One of the operators' central value propositions was quality. They could assure customers that their devices worked on their networks. Operators also offered a nice, end-to-end service that made devices easy to purchase and operate. There was no finger-pointing, as users sometimes experience when troubleshooting a problem on a home network, with the ISP and computer, router, and software manufacturers all trying to blame each other. Mobile operators were able to turn this "one-stop responsibility" into a key element of the value proposition that they marketed to consumers.

Cracks in the Wall

A number of market forces are eroding the value that mobile operators enjoy from the strong linkage between devices and the network.

Customers have been growing increasingly impatient with the time it takes carriers to approve the latest "cool" devices for use on their networks. The hacking and contortions that consumers have gone through to make the iPhone work for their country or preferred network clearly demonstrate the pent-up demand. Device manufacturers have started to exploit this "crack in the wall" by trying to approach end users directly through advertising and loyalty schemes—even creating their own retail outlets. Devices now come equipped with side-loading memory sticks and connecting cables that allow end users to load content directly onto their devices without going over the operator's network.

SIM cards, used in the predominant GSM network technology, have actually decreased the effort, risk, and hassle of transferring address books and other device-resident data to other handsets. Just pop the card out of the old device and slot it into the new device, and the data goes with it. SIM card technology, combined with the power and global reach of eBay, also has allowed customers to buy "unlocked" devices and purchase only network connectivity from an accommodating operator.

Large corporations have used their power to force popular business devices (such as the Blackberry) onto mobile networks, diminishing operators' branding and differentiation. Finally, the prevalence of new 3G high-speed data networks has made the mobile Internet a reality. Customers can now directly surf the web for desired content such as music and ringtones, rather than remaining behind the walls of the provider's private garden.

Other factors are also cracking the walls. Like the end of the AT&T Black Phone and, more recently, the separation of the cable card from the set-top box, over-the-top (OTT) content and application providers, along with regulators, have instituted programs to accelerate the trend to a truly open, mobile world.

Open software standards such as Linux Mobile (LiMo) and the highly anticipated and much-publicized Android platform championed by Google demonstrate that alternative, open technology models exist. Remarkably, several large operators, such as Verizon and AT&T, are publicly embracing these open standards as a new way to differentiate themselves in the marketplace. Equally, competition from Wi-Fi hotspots and the emergence of WiMAX also demonstrate the viability of open business models. To expedite this move to a more open world, in the recent 700-MHz spectrum auction, the FCC required that access winners make their new networks open to any device.

So Many Questions, So Little Time

The continued erosion of the walls surrounding the traditional mobile operator industry fundamentally alters much of the differentiation upon which mobile operators compete for and retain customers, and threatens to impact significantly operators' sources of revenue and profitability.

Mobile operators are now asking themselves if this seemingly inevitable new world is detrimental to their overall business model. When we speak with operators, they want to know what actions they can take to mitigate their risk. Progressive operators are trying to understand how they might capitalize on the range of new opportunities offered by an open handset environment, while maintaining the benefits of their traditional business. Our response is that this new, open environment does indeed threaten traditional business models. But for those willing to embrace the new opportunities of an open mobile world, the benefits outweigh the threats.

A World of Opportunities

Although this move to a more open mobile world seems fraught with risks and challenges for the traditional mobile operator, we believe this cloud has a genuine silver lining. This evolution offers significant economic and business benefits if mobile operators take specific actions to mitigate the inherent risks in open platforms:

Break the "Subsidization Drug": By letting customers choose their own handsets and point of purchase, carriers could save an average of \$200 or more per device, formerly spent to subsidize handsets to attract customers. The industry would love to wean itself from the "subsidization drug," but no one wants to be first to pull the plug and suffer the negative implications inherent in the current industry structure.

Cut Customer Support Costs: Customer service calls and costs should dramatically decrease as operators will no longer need to field the plethora of operator-specific device and application inquiries that currently swamp their call centers.

Reduce Retail Stores: Mobile operators are currently some of the largest retailers, operating networks of thousands of stores to sell their integrated, branded product. These chains of stores with high fixed and operating costs could be significantly downsized as other non-network providers sell directly to the end user.

Attract More Subscribers: Lower costs and availability of a larger range of devices mean that operators should be able to attract more subscribers to their networks.

Equally, they can cost-effectively service lower-value segments of the market that were previously unavailable to them.

Grow Non-voice Traffic: Making network connectivity easy should result in the rise of devices embedded with wireless capabilities (such as gaming, video players, and electronic books). Most important, it should facilitate the long-awaited growth of machine-to-machine communications. For instance, patients can have their vital health status unobtrusively monitored, or remote vending machines can call for a refill.

Increase Network Effectiveness: More devices and subscribers on mobile networks should result in higher network utilization, improving overall ROI on the huge capital investments that mobile operators have made in their networks.

Heighten Customer Satisfaction: Presumably, lower prices to end users, greater choice, and not being responsible for all aspects of the customer experience will boost overall customer satisfaction from its current poor rankings. Equally, operators can offer more differentiated customer offerings, where advanced support may be a premium service.

Enhance Market Responsiveness: Currently, long testing and planning cycles mean that operators are often slow to respond to changes in the market. Eliminating or streamlining these processes means that operators will be able to respond more quickly to new opportunities or market changes by refining pricing plans, launching new services, or attacking new segments.

Enable New Business Opportunities: When mobile operators are no longer required to do everything, they can focus on their core competencies and seek complementary partners to launch new services. Ideally, they will be able to do this more rapidly and successfully than when they owned all aspects of the service.

Holes in the Silver Lining

While an open mobile world potentially offers wonderful, new opportunities to mobile operators, there are potential challenges and roadblocks along the way. We believe that unless properly managed, this new world could threaten both revenue growth and healthy margins.

As the key basis of differentiation around handsets, devices, and unique data services is slowly stripped away, operators could quickly find themselves in a commoditized role. The customer may buy only connectivity from the carrier, seeking value-added services elsewhere. Or worse, the end user may have no direct relationship with the network operator, buying connectivity as part of a bundled service from a device provider or value-added reseller. As a result, there is a risk that price could become the major basis for competition.

Revenues from high-margin, walled-garden services like email, ringtones, and downloads have contributed significantly to the mobile operator's bottom line. As in the more open wireline world, however, these services are likely to migrate to OTTs, with only a small share of the revenues, if any, going to the mobile provider.

Almost from its inception, churn has been the number-one battle of the mobile industry. In an open world, connectivity is potentially viewed as a commodity and the operators lose their major advantage of customer switching costs—the customer's financial and personal investment in the device. As a result, customers may be more likely to churn, causing operators to significantly increase their investments in customer retention and reacquiring lost customers.

Succeeding in an Open World

The key to success for mobile operators is to wholly embrace the opportunities presented by an open world, while mitigating the risks it poses to the traditional industry ecosystem. Mobile operators can employ a number of strategies to manage the challenges to their current business.

1. Fighting Commoditization

New Levels of Customer Interaction: Seek opportunities to compete for customer mindshare through increased customer intimacy. Rather than being all things to all customers, identify niche areas that allow you to create a value proposition that encourages customers to share information in return for higher levels of value and service. Equally, create a level of intimacy with both end users and wholesalers by making it easy to do business with you. Streamline and open key points of interaction—such as activation, billing, and services—to ensure that you are the preferred network provider.

Investments in Quality: Continue to make investments in your network to lead the industry in the quality metrics of coverage, connectivity, and speed. Network quality will continue to be one of the key decision factors for people seeking to enable all of the new devices and applications. Providing top-quality service to customers and wholesale partners alike will be a key requirement to ensuring that you are the network provider of choice.

Aggregate Content with Enhanced Customer Experience: There is an opportunity to make people want to stay within your "walled garden" by increasing the value of content and associated services, including better targeting and higher quality of service (QoS). Create open developer programs to attract developers to your platform in return for access to a large user base and a slice of the pie.

2. Avoiding a Decline in Average Revenue per User (ARPU)

Take Advantage of New Economics: Operators will need to reengineer their businesses by downsizing redundant functions and streamlining processes to realize the promise of significantly lower costs. You then need to turn these new economics and productivity gains to your advantage by lowering prices to end users and expanding the wholesale market (while maintaining target margins).

Increase Collaboration with Third Parties: Mobile operators have traditionally been reluctant to work with third parties. In the open world, innovation and revenues could come from anywhere. Interoperability with third parties will be essential. Ensure that your key systems (for example, billing, ordering, and activation) interact easily with the systems of your customers and partners. You will need to use their unique assets to provide value-added services to third parties that enhance your offering. Not only will operator services such as billing, customer insight, presence, and location make you an attractive partner, but you can charge third parties for these valuable services. By collaborating with third parties, each selling the other's offering through their own channels, the collective channel footprint can be greatly expanded. Finally, explore ways to create new offerings that can be jointly bundled and marketed to end users.

3. Battling Churn

Employ Loyalty Programs: Consider implementing programs that reward customers for staying. The value of these programs can be enhanced by collaborating with partners and other third parties to increase the "stickiness" of each other's services.

Continue Use of Contracts: Entice customers to sign contracts, creating perceived switching costs by rewarding them with added value or lower prices, or by subsidizing part of the overall service.

Make Creative Offers: Develop attractive pricing plans and innovative (and, ideally, exclusive) offerings together with partners and third parties that clearly differentiate you in the marketplace.

Falling Walls, Rising Opportunities

The walls are beginning to topple. New technologies, regulations, and market forces are reshaping the traditional mobile landscape into a more open world. At first glance, this seems to threaten the closed world that mobile operators currently enjoy. On closer examination, we believe there are a number of new and exciting opportunities opening up to mobile operators. Of course, these opportunities are not without risks and challenges, but by employing a number of key strategies, operators can successfully manage these risks and partake in the lucrative opportunities that await them in this next phase of the mobile world.

For more information about open mobile solutions at Cisco, please contact:

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