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The (Mobile) Web Changes Everything: Ten Steps for Mobile Carriers to Get Back to Growth

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The iPhone was released in the U.S. market in 2007, unleashing the smartphone revolution and captivating consumers worldwide. To mobile carriers, the five-year anniversary (and release of the iPhone 5) represent a complicated milestone. The promise of the world in the palm of your hand finally arrived for consumers, but the carriers, having lost their monopoly over consumers, struggle to meet consumer demand growth profitably, while their stock prices languish.

As Figure 1 shows, since 2002, carrier shareholder value has gained little, while high-tech company values soared. Carriers don't want to be "dumb pipes" like utility companies, but the market is pricing them that way. U.S. carrier stocks underperformed the Dow Jones Utility Index for the last 10 years. The recent carrier stock price increases are due to attractive dividend yields as investors seek large-cap high yielding dividend stocks with strong safe cash flow (which stem from the prolonged period of near zero interest rates) and do not reflect a shift in the growth prospects of the carriers. For carriers, it is the best of times and the worst of times.

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Figure 1. Stock performance 2002-2012. AT&T (T), Verizon (VZ) versus the Dow Jones Utility Index (\$DJU) and the S&P 500 (\$SPX).

The advent of the mobile Internet is accelerating change in the mobile ecosystem for all businesses. The proliferating flood of dedicated mobile Web applications on smartphones brought the **usable** mobile Web to hundreds of millions of new consumers. The radical change in play grows partly from the cycle of destruction and transformation inherent in the transition from voice communication to e-mail (Blackberry), to WAP (Wireless Application Protocol) browsing and now to the full mobile web user experience.

Now, carriers and their partners are in a precarious place. U.S. carriers have little hope of successfully transmitting the flood of data and video that consumers are demanding over their overloaded networks. The demand for their services is exploding, but direct profits are inadequate to both fund the network expansion investment required and provide growth-level returns to investors.

Consumer frustration hurts brand value and can lead to unexpected consequences such as value going to suppliers or pressures on regulatory structures for their franchises growing unexpectedly.

How Did We Get Here?

The (mobile) Web changes (almost) everything. First, the smartphone revolution energized the mobile Web and upset underlying assumptions about what, when, and how carriers provide value to mobile consumers. As the mobile Web becomes the rule, not the exception, the volume of data and video is skyrocketing, a development which risks consumer disappointment because their expectations are higher than the carriers' networks can deliver. Second, smartphone vendors are now at center stage, having displaced the less glitzy, but critical infrastructure and software suppliers, which possess the essential abilities needed to meet the smartphone-enabled flood of data traffic.

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Shared Value in the New Mobile World

The two key events of the smartphone revolution are the 2006 AT&T/Apple iPhone deal and the less familiar 2005 T-Mobile flat rate data plan (Web 'n Walk), which featured Google on the home screen. These services departed dramatically from industry practice, igniting far-reaching changes in the marketplace. In both instances, carriers saw themselves falling behind their more aggressive competitors (Verizon Wireless and Vodafone, respectively). These successful, come-from-behind maneuvers worked by sharing value with strong Silicon Valley players. This transformation was so successful that carriers are now struggling to define their unique role in creating value because they fear that they risk being overwhelmed by partners' brands—Apple and Google.

In the boom phase, carriers survived and grew by becoming smartphone distribution channels and building out their networks as fast as possible—a strategy that did manage to keep them in the game. While carriers' brand expenditures, handset subsidies, and strong networks for retail distribution are critical to smartphone success, the carriers are struggling to convey their value to consumers and the markets, and also to pay for complex, high-performance networks. Their partners are reaping a disproportionate share of the margins, as well as the enterprise value that comes as a result.

It will become more challenging to meet consumer expectations—to build and manage networks that will carry the explosion of data traffic of mobile Internet-driven businesses. In economic terms, the scarcity of bandwidth reinforces the value of the carrier's spectrum, operations, and consumer trust. But if consumers are disappointed, this can have significant negative brand and willingness-to-pay consequences.

The new race for mobile social networking and m-commerce will generate more disruptions in the land grab for consumers and value, and it will also exacerbate tensions between carriers and their partners. If the past is prologue, this next evolution will bring huge new value to consumers through the mobile network, but it will also likely further dilute the competitive position of the carriers in the struggle for consumer mindshare.

Two Challenges Define the Future

The new challenges will force carriers to both define the value they provide to consumers and redefine their relationships with their partners. Radical change has already swept the market; more change is coming. Consumers will get better services, but carriers and their partners will face intense challenges. If value is the issue, carriers will need both to generate more of it, and to structure their efforts to recapture value and focus on how they engage and position value.

Here are 10 ways to improve carrier enterprise value going forward. Items 1–6 focus on steps to recapture consumer value, and 7–10 focus on steps to redefine the partnerships that deliver that value to consumers.

Recapturing Consumer Value

1. Build a brand framework that combines the carrier and its partners' respective brand power.

Brand is shorthand for describing the value to consumers. Some carrier partners are now worldwide iconic brands; you can't beat them, so join them. This may require a carrier to position itself as a **"brand of brands"** that provides choice and showcases direct comparative positioning of multiple handset offerings. If we are correct, "brand of brands" could supplant "network of networks" as the next big thing.

Beyond associating with iconic handset brands, carriers need a strategy and message about their role in bringing the iconic handset or Web brands to consumers. If consumers must choose between Google's Android products and Apple's iPhone, the carrier should provide consumers with both choice and guaranteed levels of trust and service, and also serve as an honest broker to get services to talk together. Carriers need to rise above the brand fray of competing handset ecosystems.

2. Focus on core consumer value.

Within the brand of brands concept, carriers need to define their core consumer value. Every brand depends on an underlying, constantly evolving logic, which, year after year, serves as the basis for its relationship with its consumers.

In contrast to other consumer products like Coca-Cola, for technology products there is an ironclad relationship between consumer value and product features. Carriers' consumer value assets include the following:

- connections to those closest to us, to work, and to the world, (the network);
- choice of tools (i.e., handset choices and access services); and
- the intangibles—reliability, security, and self-esteem.

Advertising carriers' coverage is a poor substitute for advertising to consumers the core value of the connections the carrier provides. 3G or 4G advertisements often obscure the core consumer value which makes up 60%–80% of a consumer's bill: connections—from "phone home" to "call the office" or "text mom."

Carriers rightly focus on core functions such as providing choice for handsets, but core voice and text services are about more than coverage. Many carriers have eliminated their product managers for voice and text, reasoning that they are mature products and do not draw in new consumers. Carriers usually still ignore or poorly present their core data offerings and the conveniences they bring to consumers' daily lives.

Billing is the core carrier touchpoint that needs the most reengineering. Billing is a constant source of irritation and "bill shock" to consumers, and not used as an opportunity to engage them. American Express never apologizes for billing its consumers; in fact, it actively rewards them the more they spend. AmEx's bills are more readable than most carriers' bills. Current billing practice hampers the carrier's ability to capture greater value from the trust relationship that underlies billing.

3. Target carrier-sustainable advanced services.

To grow, carriers need to harvest some of the value of advanced services. The consumer's hierarchy of value drives the possibilities for carrier value—and often, it is revenue shares for partners that create value. Carriers will likely do better when they

- add related advanced services (phone books management, storage, reminder lists, social networking opportunities, etc.) to their current core services;
- target services that require connections across incompatible handset ecosystems, and that are also done better when embedded deep in the network (for example, video calling and conferencing have huge potential); and
- exploit advantages that could come with HTML5 (the newest version of the markup language for structuring and presenting content for the World Wide Web), which brings in huge potential for third party partners to offer new services (and also to counterbalance mega-brand partners' market power).

We applaud the idea of carrier app stores and other catch-up attempts, but we doubt that carriers can recoup their losses without developing a radically different approach. Unless the core carrier value is set up or appropriate for new apps, even successful applications are difficult to sustain. Partnership programs use major app brands to harness the potential of millions of developers and share in the revenue. Carriers need to respond with more than developer programs. Major opportunities also exist to reconstruct advanced services through subsidiaries or spinouts that are carrier-owned. This is especially so where carriers are less hampered by forces that constrict action and thinking in the regulated business, and/or by major carriers investing in platforms like Yahoo!, AOL, or smaller services providers with a specific plan to focus heavily on mobile services. These and other out-of-the-box solutions reflect the need to cut loose the services groups to focus on use applications and move at the pace necessary.

4. Mobile commerce is huge.

Carriers missed the first round of m-commerce and mobile advertising because they disagreed on cross-industry standards and solutions. The same pattern is repeating itself with mobile payments. Carriers know a great deal about their users and already have a billing relationship with them, but they were slow to build effective m-commerce solutions. Unless carriers finally get it right, there will be other new eBay or PayPal-like opportunities on mobile.

Carriers need to do more than support new standards; they need to build a winning solution in cooperation with major credit card or payment companies that know purchasing. If carriers alone try to develop mobile industry transaction standards and seek solutions from scratch, they will likely fail.

5. Analytics rule.

The mobile phone is the first *personal* communications device in history. Smartphone user data provides detailed insights into every aspect of usage. Personalizing services is a major opportunity; the analytics available today enable this in ways inconceivable previously.

Carriers are at the early stages of collecting, analyzing, and applying their data to both tailor services to consumers and upsell service plans beyond the familiar contract renewal phone-replacement offers. Carriers felt constrained by U.S. FCC rules on the usage of customer proprietary network information (CPNI) and thus were reluctant to aggressively address the analytics opportunities. There is significant room for action with the potential for customer opt-in, possibly paving the way for future regulatory relief.

It will take time to develop the skills to define services from the data; carriers need to launch these efforts immediately, both alone and with others. The financial services companies, credit card companies, supermarkets, chain stores, and airline reward programs all built up expertise in up-selling consumers from basic to premium levels, and they are still learning. Opt-in programs and third party relationships show ways to use the value of analytics within current legal constraints and reap more of the value that the mobile phone is providing to end-users.

6. The enterprise mobile market has arrived.

Some users come in big groups; enterprise CIOs fought wireless every step of the way and thus lost out. Now, they seek the productivity associated with wireless. Corporate mobile network calling and mobile video conferencing are huge revenue generators where third party providers cannot offer complete services without carriers. Many segments of the enterprise markets are growing, but they are vertical and difficult to develop alone. Strong partners are needed to execute.

Sourcing Value

7. If carriers fix only one thing in their networks, fix compression.

When carriers lost control over smartphone services, they lost control over their traffic streams. Carriers need to create new capacity quickly. The relative lack of compression in the iPhone and other smartphones' implementations is degrading network performance and spreading consumer disappointment.

Mobile video bandwidth requirements are even more significant than mobile data communications and will cripple every carrier's network. Video growth projections are huge, not just because of mobile TV or YouTube, but because small screens display video better than complicated text. Video on mobile, including 3D video, will be a major vehicle driving mobile advertising. More frequency is essential for expansion, but it takes several years to build out enough new licensed spectrum to make a difference. Carriers cannot outrun this data tsunami; they need to find higher/better (compression) ground.

8. Web networks are different; migrate now.

The mobile industry knows, but has not internalized the implications of moving to much higher data traffic devices. More traffic will move to the periphery of the network. Consumers will sync their smartphones to their laptop on the same cell site. Carriers speak TCP/IP as a second language—they know all the ins and outs. But these new traffic patterns will require flatter, cheaper architectures to upgrade, to industry-standard implementations, and higher levels of capacity management. Although energy has been poured into end-user applications, advanced peripheral traffic management and the commercialization of actual quality of service (QoS) options have received only modest attention. Rather than wait for consensus or industry-wide agreement, carriers need to aggressively address and manage their traffic now.

9. Mobile cloud service's time is now.

The mobile browser is the original mobile cloud service. Upgrade fast. There is money to be made connecting all types of consumers to services, including feature phone and basic phone users, as well as to everyone else, across platforms. From address books to backup, billing, and services, there are huge opportunities to outrun device-specific solutions across platforms—the time when smartphone ecosystems will supply all the answers is waning. What is new here, compared to existing carrier portals, is the focus on core functions and the use of existing cloud services for mobile applications.

Another impact of the movement to HTML5 is the continuing evolution to more open systems that will unleash a plethora of new services from new providers, something that will further erode the service positions of carrier services. Presuming that new third parties will emerge, now is the time to begin to work with them or develop new kinds of hosting relationships, such as being the mobile content delivery network (CDN) suppliers or cloud hosts for these new applications. Security and storage, for example, will be in huge demand for mobile access to the cloud revolution in computing. Carriers can share access to the network to get a share of the value that travels over the network.

10. Purchase strategies are at cross-purposes with growth; realign.

Carriers were system integrators of standards-based equipment into service offerings to their consumers. For both hardware and software, the carriers have pursued purchase strategies at cross-purposes with their interests.

First, carriers recognize the need to offer new services from new entrants. Apple and Microsoft have defined the parameters of their relationships with large and small value-added resellers with impressive consistency. Carriers have yet to define and set up infrastructures to enable, nurture, and

manage supplier relationships that create new margin opportunities. Collaborating with new third-party software partners will likely provide revenue before more complicated net-neutrality transfer payment or fee structure discussions are resolved.

Second, carriers have reduced the number of suppliers, both to increase the speed and ease of product integration, and to reduce costs through the aggregation of demand in a move to win lower prices from suppliers. However, the emphasis on cost has grown out of proportion to the importance of building new services and enabling differentiation. If part of the value of a carrier is to monetize systems integration, it becomes more difficult to differentiate services; if competitors are buying the same equipment and software from the same suppliers. Carriers need to lower costs while rethinking how to invest in both more new capabilities and innovative new suppliers to build robust, profitable networks.

It Is Time for a New Playbook

Capturing value—identified by brand and won with service differentiation—is the source of profits. A playbook, which addresses these 10 key challenges, is critical to managing any carrier's ability to gain market share and systematically rebuild its enterprise value. Taken together, these 10 steps provide a framework and a list to align, prioritize, execute, and measure progress in transforming mobile carriers into growth engines of new services and value.

Which of these 10 steps is the most important? That answer will be different for every carrier, but our discussions with leading carriers, suppliers, and partner/competitors revealed an astounding level of common understanding of the problems, remarkable unity on the 10 items, and grudging acknowledgment that carriers need to refocus on a unifying theme ("the brand of brands" is the leading candidate). It was also acknowledged that the carriers need to redefine their relationships with partners and suppliers to serve their urgent need to create new products where they realize more of the margin. Why redefine the focus and partner relations? Carriers are not prospering now, despite the explosive growth in the mobile marketplace, and they will not prosper by following their current path.