



# Mobile Product Development: To App or Not to App?

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**Summary:** The recent excitement over mobile devices and the growth of the mobile Web has much to do with the new sexy devices that have taken over the market. We have the iPhone to thank for that: It has raised the bar, prompting copycat devices to flood the market and compete on price. That, plus carrier subsidies, has brought down the price tag for the new class of smartphones to about \$200. But even more influential in driving smartphone sales and mobile Web adoption will be the availability of tens of

thousands of applications. These are the killer apps of mobile — without them, we would simply be dealing with expensive portable telephones. So what are the opportunities to build and market these applications to extend your brand and reach to mobile users? What have others done? What should you keep in mind? And which of the growing number of mobile platforms should you choose? These questions are among the first that many mobile app developers face and are the focus of this report.

## Where to Begin

Since The Kelsey Group's Mobile Local Media program launched in February, we've built a foundation of content and data to frame the mobile local opportunity. The next step is to begin deciphering what it means to the many companies inside and outside the local search sphere that will attack the opportunity from different angles.

An important question companies inevitably encounter is how to reach the largest number of mobile users. This will always be important, but it is particularly relevant in the early stages of the mobile Web's growth. We're at a point when search volumes and ad inventory — though highly targeted — are still relatively low when compared with many other media.

Since reaching a critical mass of users is more challenging, platform choices that enable the largest

possible reach are vital. But standing in the way of this goal is mobile device and platform fragmentation. When creating mobile search products, how do you prioritize finite development resources toward myriad device, operating system and format options?

SMS has the most adoption and reach (i.e., all cellphones), but the iPhone has the most user engagement and attractive audiences for marketers. Between the two lie a spectrum of options, including mobile Web sites, Web applications and Java apps customized for hundreds of devices.

"It's an interesting debate," says Peter Schwab, Idearc Media director of mobile products. "Do you go with device share, engagement share, data share, growth share, or the companies behind these devices such as Google and Microsoft? It's a tough landscape to determine where you throw your dart."



## Platform Options for Mobile Search Products

SOURCE: THE KELSEY GROUP (2009)

FORMAT	DESCRIPTION	PROS	CONS
SMS	Users send text messages to designated five-digit codes, prompting search results, links to a mobile Web site or periodic alerts (i.e., product promotions)	Maximum reach; compatible with all cellphones	Functionality limited to text; engagement relies on opt-in
Mobile Web Site (WAP)	Simple text-only sites that provide list-based information or search results such as sports scores	Wide reach, including all mobile devices with Web browsers and data plans	Functionality limited to scrolling and browsing; limited input and interactivity
Java Apps	Native apps downloaded directly by going to a mobile site; applications install on the home screen of compatible phones	More robust than WAP experiences accessible by same class of phones	Maximum reach involves developing different versions of same app for hundreds of handset models
Web Apps	Web sites built to be viewed on smartphones with full HTML Web browsers	Easier to build than native apps available for same class of phones	Not as robust as native apps; requires direct navigation to mobile site
Native Apps (App Stores)	Built specifically for smartphones and marketed within designated marketplaces such as Apple's App Store	Most robust apps possible with the greatest long-term potential	Require the most development resources and currently have most limited overall reach

### Mobile Buffet

Yellow Pages companies have been among the most aggressive of the many online services and publishers that have begun to launch mobile products as extensions of their brands (see TKG Advisory "Yellow Pages to Go: Publishers Seek Position in Mobile").

Many Yellow Pages publishers out of the gate have decided to devote considerable resources to reaching

a mass market audience on each of these formats. Yellowbook, for example, offers downloadable applications for the iPhone, Google Android, Windows Mobile, Palm and BlackBerry.

Idearc and AT&T (Yellowpages.com) likewise have an extensive set of mobile products for each platform, including SMS, WAP and iPhone apps. Maximizing reach has been the name of the game in extending their



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brands and user experiences to the mobile device.

R.H. Donnelley was the last major U.S. publisher to launch a mobile suite of products, but it is arguably the most comprehensive. It includes an iPhone application, a downloadable Java app compatible with hundreds of handset models, a mobile Web site and an SMS tool.

“It’s all about extending your reach through different devices and platforms,” says Deborah Eldred, RHD director of mobile and personalization. “We want to make sure we hit the mass of the subscribers but also hit the mass of usage, which is smartphones.”

The goal is not only to reach a larger portion of the market, but also to capture users at different stages of the mobile adoption cycles, says Eldred. This provides a higher likelihood of acquiring longer-term or lifetime users.

“In the past, people turned their phones in every two to three years. Now it’s more like 18 months,” she says. “The goal is for those people to have us and know us and bring us with them to their smarter phones.”

Yellow Pages publishers have the advantage of possessing the resources to devote to mobile development. Though they’ve sustained sizable valuation losses, many publishers have lots of cash on hand. Smaller companies are conversely left with fewer options in most cases. This was a challenge popular local review site Yelp encountered.

“We’ve had a lot of success with our iPhone app, and we know we have to put more resources into mobile development,” says Sonia Survanshi McFarland, Yelp head of business development. “But you have to quantify how much it’s going to cost from a human resources perspective and weigh that against what else that developer can work on.”

Even Yellow Pages publishers that launch a range of mobile products have only scratched the surface. Downloadable Java apps for feature

phones involve a long tail of devices that require separate application development based on their individual specs.

Meanwhile, although the smartphone application marketplaces have standardized development to a certain degree, they still involve varied development kits, timelines and approval processes.

“We know we can’t have the world, so we have to prioritize development resources and track data to find out where the biggest opportunities are,” says RHD’s Eldred. “Next up could be development for other app stores, such as Google or Palm.”

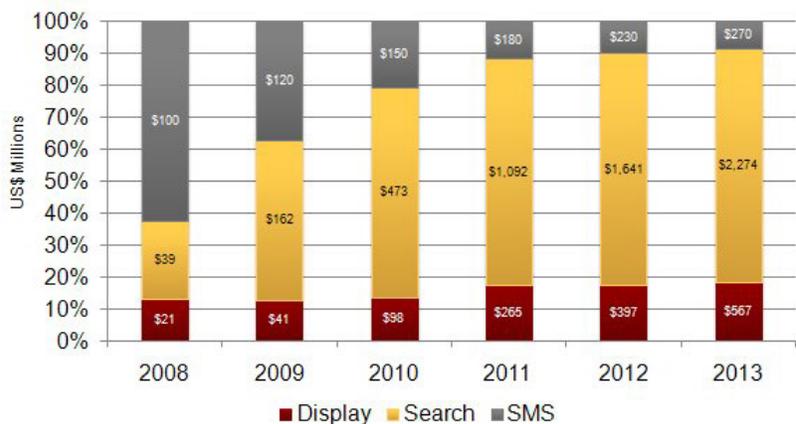
## The Killer Apps

The application marketplace, pioneered by Apple’s App Store, has accelerated some of the recent growth and excitement around the mobile Web. Though SMS, device-specific Java applications and WAP sites currently offer more reach, future potential lies with native applications built for the growing subset of application “stores.”

This has happened in step with increased smartphone sales, which are outpacing the overall global handset market. Smartphones now represent about 20 percent of U.S. mobile device ownership,

## U.S. Mobile Ad Revenue Breakdown

SOURCE: THE KELSEY GROUP (2009)





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according to TKG's latest Mobile Market View survey, an annual consumer study of U.S. mobile phone users.

This has also been accelerated by carrier subsidies: To drive data subscriptions, many carriers have begun to lower the upfront costs of popular smartphones such as the iPhone and Palm Pre, which launches this week. The price point for many of these devices is settling in around \$200.

This penetration is the largest impetus for the growth of the mobile Web, which will bring mobile ad revenues to the \$3.1 billion projected in TKG's U.S. mobile ad revenue forecast. The Web browsing capabilities of smartphones will likewise cause search to eclipse SMS as the leading mobile revenue source over the forecast period.

But it's not just better screens, keypads and Web browsing that set smartphones apart. The user empowerment to choose between tens of thousands of new applications will be a big growth driver. The app stores will serve the dual purpose of adoption driver and incentive to innovate.

To the latter point, app stores have standardized development and lowered barriers to entry for third-party developers. But they're also beginning to present challenges to developers as they further fragment the user base by growing in number.

We now have the Apple App Store, Google's AndroidMarket, the Palm SoftwareStore, BlackBerry App World, the upcoming Windows Marketplace for Mobile and Ovi Store from Nokia.

Assuming companies decide they want to develop applications for these marketplaces, the question then becomes which one?

Even for companies that have resources to answer this question with "all," what is the order of prioritization that will optimize market penetration?

There is no one-size-fits-all answer. Companies must examine a number of factors, including subscriber volumes as well as more qualitative considerations related to the types of users occupying these networks. Various market factors also come into play. Moves currently being made by carriers, device manufacturers and mobile OS providers are starting to indicate future market shares, which should influence current product planning.

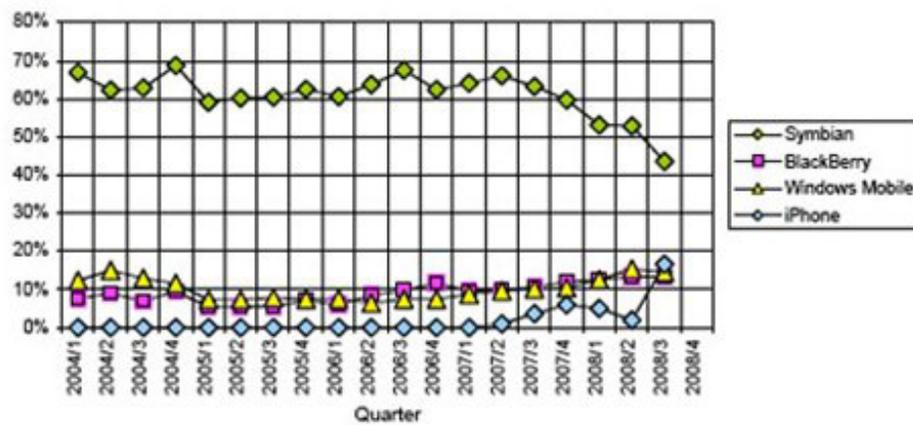
### By the Numbers

Perhaps the best starting point is to look at present global mobile OS market shares and where they're moving. Apple has seen a clear spike, which began around the time of the iPhone 3G's introduction in July 2008. The AT&T subsidy that brought the phone down to \$199 was a big driver for this, as was the simultaneous introduction of the App Store.

Whether or not there was a causal relationship, a subsequent dip in share occurred for the market's

## Global Smartphone Market Share

SOURCE: NEEDHAM & CO. (2009)





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longstanding leader, Nokia's Symbian, according to Needham & Co. data. Research in Motion (BlackBerry developer) and Windows Mobile remained relatively flat.

Google's Android platform isn't represented in this chart, as it wasn't available outside the United States. It began to compete internationally after last month's launch of the Android-powered HTC Magic in the United Kingdom and other markets where Vodafone operates.

AdMob meanwhile reported in March that iPhone and Android are the only mobile operating systems whose shares of mobile Web activity are growing in the United States. AdMob's share data are based on the ad requests seen on its network.

The iPhone's lead isn't surprising, as many other sources have reported similar data. The growth rates of iPhone

and Android are notable though, and they are telling of where mobile Web growth could continue to be seen.

This is supportive of the notion that operating systems that support Web applications more effectively through better mobile browsers are likelier to see traffic growth. The anticipated Palm Pre, for example, has much-touted browsing and search capabilities and will likely compete on this measure.

AdMob's global figures are similar. Here again, Symbian's double-digit loss of mobile OS share matches Apple's growth during the six-month period measured. Others have seen single-digit declines (Android is again missing from the list due to unavailability outside the United States).

Net Applications meanwhile reports an even greater

share of mobile Web activity happening on iPhones (see chart on next page). Its March U.S. mobile platform market share report indicated that two-thirds of all mobile Web traffic is happening on iPhones. This is almost 10 times the closest competing platform, Windows Mobile.

## U.S. Operating System Share

Rank	Manufacturer	Feb 09	Aug 08	6 mon Change
1	iPhone OS	50%	10%	40%
2	RIM	21%	32%	-11%
3	Windows Mobile	13%	30%	-17%
4	Palm	7%	19%	-12%
5	Android	5%	--	5%

## Worldwide Operating System Share

Rank	Manufacturer	Feb 09	Aug 08	6 mon Change
1	Symbian	43%	64%	-21%
2	iPhone OS	33%	4%	29%
3	RIM	10%	11%	-1%
4	Windows Mobile	7%	13%	-6%
5	Palm	3%	6%	-3%

SOURCE: ADMOB (2009)

### Quality vs. Quantity

To put some of the above figures into perspective, the iPhone represents more than 50 percent of mobile Web traffic, but it only accounts for about 30 percent of smartphone sales in the United States.

This says a lot about the greater portion of mobile browsing happening on iPhones. It's partly a result of the capabilities of the

## iPhone Leads the Pack

SOURCE: NET APPLICATIONS (2009)



device itself — involving more “mainstream-friendly” browsing features.

But it also has a lot to do with the self-selected base of iPhone users, which tend to map to greater data consumption. These users also represent demographically attractive marketing targets with higher incomes and levels of purchase intent.

According to comScore, 35 percent of iPhone users have annual household incomes of more than \$100,000 (32 percent higher than the average online user). More than half meanwhile have annual household incomes greater than \$75,000.

iPhone users are also three times likelier than the average online user to visit sites dedicated to communication, social networking, entertainment or gaming — holding clear implications for app developers in these areas.

Overall, iPhone owners are heavier users of mobile apps when compared with other smartphones. Research firm Compete reported in April that the number of applications downloaded per user tends to be much higher on iPhones than RIM (BlackBerry), Palm and Motorola smartphone users (see chart on next page).

“Some people just look at the device and the growth of the device, but you have to understand who are the people using the device and what are the apps they’re

likely to use,” says Siva Kumar, chief executive officer of The Find, which launched an iPhone app in November 2008. “With BlackBerry, for example, there is a lot of installed base but a different type of customer, and you need to ask yourself if it’s the right user.”

The iPhone also has the benefit of nearly two years of usage data, which app developers can use to determine if their target audiences are using the device and to what degree.

“The iPhone was an unusual case where they didn’t launch the App Store until [a year] after the phone was distributed so you could measure usage,” says Yelp’s McFarland. “So for us, it was a no-brainer because we saw that people were already coming to Yelp on the device.”

Besides its growth and engaged user base, decisions to develop apps for the iPhone could be further supported by other hardware possibilities on Apple’s horizon. These include a lower priced iPhone “mini” and a rumored netbook or hybrid device that exists somewhere between the MacBook and the iPhone.

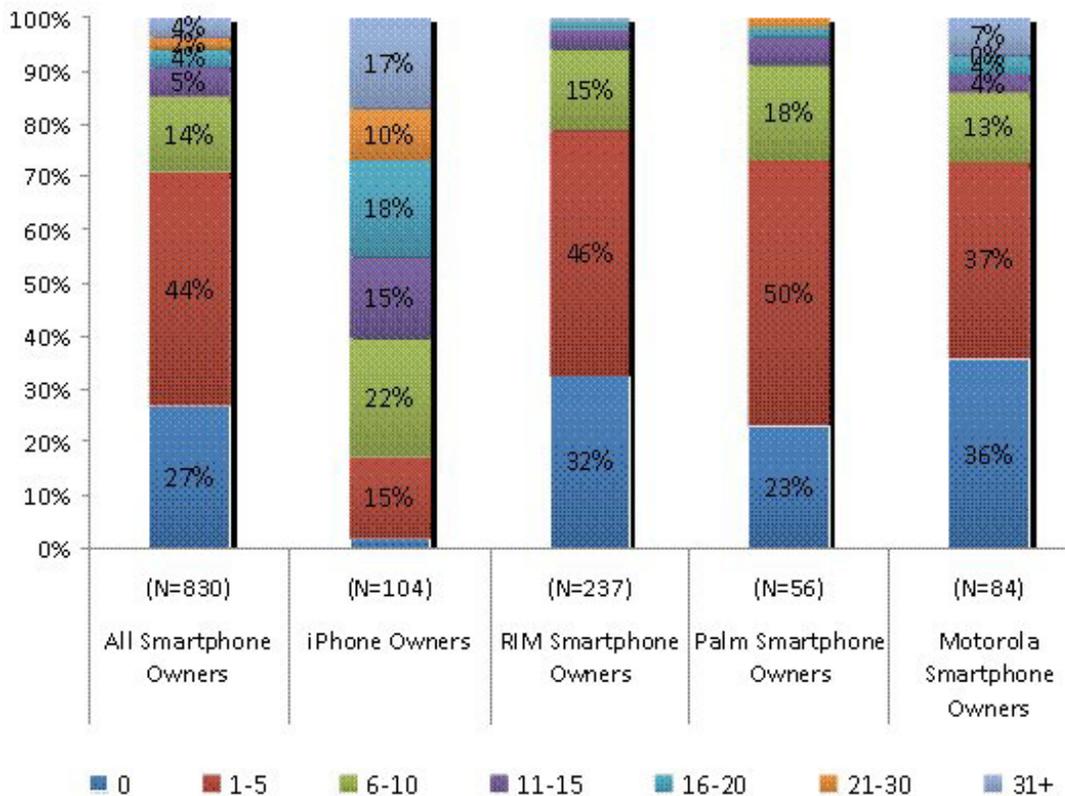
The home for software distribution and innovation for these devices could be a version of the App Store, meaning there is potential for additional distribution for companies that make development investments in iPhone apps in the shorter term.

Apple’s market share could also grow as we



## Number of Applications Users Download

SOURCE: COMPETE (2009)



approach the termination of its exclusivity with AT&T at the end of 2010. Additional carriers will likely work with Apple and expand the addressable subscriber base.

We're already hearing whispers of conversations with Verizon to create an iPhone that will run on its 4G LTE network.

### iPhone: Not All Sunshine and Roses

Though the iPhone has become a media darling and arguably the most game changing consumer product

released this decade, it has its share of shortcomings.

As discussed, it accounts for the majority of mobile data consumption. But its reach is still relatively small, at about 1 percent of mobile users. Though we expect this to grow considerably over time, it currently pales in comparison to the reach that can be accomplished with other platforms or ad formats such as SMS.

It has also received a fair amount of criticism about its hardware limitations, which suggest an upper limit to its penetration. Many users of other smartphones, such



as BlackBerry, prefer a physical keypad to the iPhone's touch screen.

There are also shortcomings to its firmware and mobile browsing experience that many iPhone blogs and user communities have spoken out against. These include the lack of flash rendering, cut-and-paste functionality, and the inability to run more than one application at a time.

The latter point basically means applications can't run "in the background" when users stop to make a phone call or run any other function. This not only affects users, but also becomes an important criterion for application developers that are in the process of choosing platforms.

It has, in fact, detracted many developers building applications that rely in any way on constant connectivity. These can include instant messaging or location aware mobile social apps like Google Latitude.

The iPhone's exclusivity with AT&T has meanwhile limited its market reach, as mentioned, and has also left it with what many consider an inferior data network when compared with that offered by competitors Verizon and Sprint.

Many of these issues will be addressed by Apple through future generations of the iPhone, and as we approach the termination of its AT&T contract. But even when it reaches that day, it will be a challenge for Apple to maintain one device — a matter of simplicity in which it prides itself — that satisfies the technical and contractual specs of different carriers.

In the meantime, these factors are barriers to greater mainstream iPhone adoption. This will limit the size of the addressable market one can reach when developing applications for the iPhone, not to mention application performance that can be tied to some of the device's shortcomings.

Furthermore, the question of application development and platform choice should consider the volume of competition. With more than 35,000 apps occupying the Apple App Store, the window for early

mover advantage on the iPhone has mostly shut.

"If it were a year ago, the iPhone would have been a better choice," says The Find's Kumar. "The App Store was relatively new and you would have been one of the first 1,000 or 5,000 apps and gotten more air play."

This will continue to inflate as a result of the iPhone's growing penetration and the App Store's relatively low barriers to entry. Virgin territory could thus be realized in some of the newer app stores launching, including those of Palm, BlackBerry, Nokia and Android.

## The Rest of the Pack

So how do the rest of the options stack up to the iPhone when examining the top objectives of most application developer? Each has pros and cons and varying degrees of audience reach.

## Windows Mobile

The Windows Mobile platform, currently in version 6.5, has the largest global market share behind Symbian and the largest installed base among U.S. smartphones.

This penetration is a double-edged sword for application developers. Its reach clearly allows for greater audience potential, but it can also lessen the quality of software applications. Because Windows Mobile is installed in so many devices, it must work with a wide variety of hardware specifications (different screen sizes, track balls, etc.).

Therefore, to operate correctly on all these devices, apps for the platform have to be designed for the lowest common denominator of functionality. This can limit the abilities of application developers and the potential quality of their apps.

Another downside to Windows Mobile is the timing of its version releases (familiar territory for Microsoft). Its current version, 6.5, is essentially a patch between 6.2 and the upcoming Windows 7 Mobile, which is the mobile version of the Windows 7 desktop OS.

However, there is no known release date for Windows Mobile 7 and little is known about its quality. Worse, its

app store won't support current versions of Windows Mobile, so developers with an eye on this installed base must wait until 2010 for their apps to be used.

Meanwhile, the size of the installed base of Windows 7 isn't quantifiable for the same reason. So carriers and OEMs planning products for the fourth quarter (holiday season) aren't interested in banking on the uncertainty that shrouds Windows 7 or in opting for the soon-to-be obsolete 6.5.

To power their new devices, many could instead look to the safer and next desirable open platform in line: Android.

### Android

Google's famous mobile OS has gotten a slow start with limited distribution in only one mobile device, the HTC Dream, which hasn't sold as well as expected. Much more is expected of the mobile OS in the next few quarters, however, in terms of carrier and OEM adoption (the recently released HTC Ion "G2" is its second shot at the market).

This could partly be a result of the aforementioned share shift from the Windows Mobile OS, but also Google's open development platform and branding, which are both seen as sales drivers. Google has stated publicly that there will be 18 Android-powered mobile phone models on the market globally by the end of the year.

As Android's market share increases, it will become a more attractive platform for third-party application development. More apps will in turn make these devices more attractive to users.

Application developers favoring Android whom we've interviewed have cited a desire to have an early mover advantage in the relatively small universe of Android apps. Other reasons we've heard relate to the iPhone's downsides, including the inability to run more than one application at a time.

As mentioned, this is particularly important

with apps built on constant connectivity such as IM- or location-based social networking. Location tool Glympse, for example, launched last month for Android. The biggest reason for this platform choice, CEO Bryan Trussel told TKG: lack of "background" functionality on the iPhone.

But more than any other reason for interest in Android app development could be its expected growth in market share. Though it's still far behind the iPhone, it has reached parity with Palm's 6 percent share of mobile Web traffic, according to AdMob's March mobile OS share rankings.

But like Windows Mobile's challenge (or at least a smaller version of it), Android's reach and market penetration could require it to operate across disparate devices and hardware specs.

### Palm

The anticipation for the upcoming Palm Pre has reached levels we haven't seen since the weeks preceding the iPhone's launch. It will have a stylish touch-screen-based body with a slide-down physical keyboard. Already, there are rumors of a slimmed-down version of the Pre

## The New Palm Pre

SOURCE: PALM (2009)





— code named Pixie — to be released later this year.

Perhaps more of interest than the hardware is the Palm WebOS powering the Pre, which has caught the attention of many industry watchers and product reviewers. It has many of the intuitive aspects of the iPhone's interface but comes with broader capability in some of the areas where the iPhone falls short, such as simultaneously run applications.

And like Android, applications developed for the Pre will be less likely than iPhone apps to get lost in the shuffle of tens of thousands of competitors. Palm will soon release its development kit (Mojo), which is based on commonly used HTML, CSS and JavaScript standards.

With the help of Sprint, the Pre's exclusive carrier, it will also compete on price. Based on early indications, the unlimited "everything" data and calling plan for the Pre will undercut that of most other smartphones on the market with a \$99 monthly price tag.

The downside of the Pre could be some of the question marks surrounding its market potential. The lack of usage data to back app development decisions makes it a risky move, as mentioned above by Yelp's McFarland.

Worse, some analysts have made divisive claims against the Pre's chances of survival. Reasons cited include exclusivity with Sprint for the first six months (after which it will be available on Verizon), which limits its potential market. During this key launch period, Sprint's recent cash flow shortages could impede its ability to back the device's penetration with substantial marketing.

Furthermore, it's mostly clear that the Pre is Palm's last shot to prove its standing in the mobile device market. So application development investments made in Palm come with some degree of risk.

## Nokia

Nokia is the mobile device global leader with about 1.3 billion of the 4 billion overall handsets sold. But within

the United States, its sales haven't kept pace with its global penetration.

There could, however, be an opportunity for Nokia to gain share here by utilizing its global operations and economies of scale to launch smartphones that compete on price. This appears to be its strategy with the touch-screen-based 5800, which retails for \$99.

Meanwhile, it has received attention for some of the higher-end smartphones it has begun to launch over the past year, including the N97. Because no U.S. carrier is subsidizing the device, its price tag is a hefty \$699.

The N97 comes pre-loaded with Nokia's Ovi Store, while other devices will have access to its functionality starting this month. The Ovi Store is Nokia's answer to Apple's App Store, and will augment the company's device sales strategy with application availability and development standards in line with the new open marketplace.

## BlackBerry

RIM's BlackBerry is well known as an icon and staple of mobile business users. It has 50 million total users in the United States. This is a strong position to be in, and BlackBerry is hoping to transition the user base into a product set that must evolve with the newer class of smartphones.

This is a blessing and a curse for BlackBerry. A massive and highly loyal user base is a good place to start, but the strength of that loyalty also makes it difficult to evolve. Product innovations can be met with backlash against departing from tried-and-true feature sets.

The worst of this dynamic has been seen so far in the market reception of the BlackBerry Storm. The Storm is an attempt to create a BlackBerry device that is both suitable to its faithful users and competitive with iPhone features (touch screen, GPS, etc.).

With this strategy it realized the challenge of trying to serve two masters, or the development challenges often seen in the creation of devices that are "hybrid." BlackBerry users have complained in large part that it doesn't fit their habitual needs, while gadget lovers



complain it doesn't live up to the iPhone.

If BlackBerry can walk the right line to market new devices that satisfy the whole market, it will be in a strong position. This is due not only to the size of its user base, but also its qualitative aspects (demographics, income levels) that will make application development and ad targeting attractive.

BlackBerry has already launched its application store, known as the BlackBerry App World. It has received decent reviews, though its apps so far don't have the elegant design and functionality of most iPhone apps. It should gain more traction with more app development.

Unlike the chicken-and-egg game that faces Palm's WebOS, there is already decent user penetration in advance of the App World launch. This is only true to a certain degree though: The App World shuns most of BlackBerry's installed user base because of its limited compatibility with models released after fall 2006.

This puts an even greater onus on BlackBerry to make sure it converts users to these new devices and picks up new ones from the massive mobile market segment that will transition into smartphone owners over the next few years.

Back to its "serving two masters" challenge, BlackBerry will still need to do more to streamline its user interface. Currently its UI is tripped up in what many consider to be too many menus and clicks. Its core users are adept at navigating its shortcuts, but the interface is mostly outdated for competing with devices that do much more than e-mail.

Walking the fine line between satisfying its base and appealing to new users will be the name of the game for BlackBerry. It won't necessarily be easy.

## **Apps vs. Mobile Web**

Thus far we have focused on native apps built for the growing set of app stores. Let's not forget the other options that have their own set of advantages including, in some cases, broader reach. These include formats such as WAP and SMS, which are accessible by the more than

80 percent of mobile users who don't carry smartphones.

Though native apps could hold the longer-term opportunity, tied to greater smartphone penetration, these simpler formats can guarantee a greater reach in many cases. It must be examined on a case-by-case basis: Beyond reach and audience targeting, consider technical specifications and application goals.

There are many iPhone apps, for example, whose feature sets could be accomplished with the capabilities of a mobile Web site or a Web site that is "optimized" for iPhone access. In the case of The New York Times' iPhone app, it doesn't have much functionality that couldn't be designed as a Web site that is built for iPhone access.

Google has proved this by having its popular Gmail service operate as a mobile Web app instead of a native app on the iPhone. It has also indicated that its Latitude location-based social network won't be released as a native iPhone app but rather will operate on the device's Safari mobile Web browser.

Currently, iPhone apps are popular because they carry the Apple halo, but also because they allow a great deal more functionality than mobile Web sites by virtue of Apple's software development kit. This includes the ability to tap into the iPhone's features such as location awareness and accelerometer (tilt features).

But Web sites optimized for iPhones (also known as "Web apps") will gain functionality over time. The HTML 5 standard that will be baked into future versions of the iPhone's Safari browser will give Web apps, among other things, the same location awareness enjoyed by their native app cousins. These advancements are behind Google's aforementioned moves to build many Web apps rather than native apps.

Apple also provides a little known "skin" to Web apps that allows them to look and act like native apps. This includes an app icon that can be planted on an iPhone home screen, even though it's really just a bookmark that launches the Safari browser and lands the user on a designated page.

Web apps will also improve in performance as better



network speeds are reached. In this way, the mobile Web could follow the same trajectory as the wired Web over the past few years. We've gone from a desktop-centric world to one in which content and services reside "in the cloud." This is the core tenet of what has become the amorphous and overused phrase — "Web 2.0."

The point is that the mobile Web could see a similar shift from native applications to more Web-based products. This could have important implications for app developers to reach a greater audience. Indeed, designing Web sites that are accessible from different devices is a smaller challenge than designing different native apps for all the platforms mentioned above.

But we're not there yet. A Web-centric mobile world will require, among other things, network performance that we haven't reached. Until then, it's (mostly) all about apps.

### Final Thoughts: A New Mind-Set

The benefits of native apps and their long-term penetration shouldn't be downplayed too much. Like desktop software, some feature rich applications will have to be built as a local client. Furthermore, many native apps have reached impressive milestones for their functionality, popularity and monetization.

Urbanspoon, for example, (one of TKG's pre-season favorites) has gained tremendous recognition and has put the little-known Seattle start-up on the map. The self-funded company has also reached profitability and was recently acquired by Citysearch.

This is all thanks to its iPhone app — something that brought it the reach and recognition it never could have achieved with a marketing plan. This was mostly due to the way it went about designing and thinking about the app.

It did so with the iPhone's capabilities — and

mobile users' affinities — in mind. This includes a spin wheel (interface offered by the software development kit) that takes advantage of the iPhone's accelerometer and minimizes typing. It also utilizes built-in location awareness to recommend restaurants that are nearby the user.

Another example is Shazam, an iPhone app that has achieved tremendous popularity for its ability to identify a song played anywhere nearby (using the phone's voice input) and then bring the user to that song or artist's iTunes page. Shazam and Urbanspoon are both among the top 10 free iPhone application downloads of all time, according to Apple.

Both of these apps would not thrive on the desktop, which underscores their biggest success factor: building apps to the unique specifications of the device itself. This is in contrast to the vast majority of apps that simply port over an online product or experience to a smaller screen.

"If you look at emerging technologies when they come on the scene, they generally mimic the characteristics and interface of the medium they are replacing," says Idearc's Schwab. "That's the case for a little while. Then, eventually, they have to become their own medium."

Urbanspoon, Shazam and a handful of others are role models in this respect, albeit they had the early mover advantage mentioned above. That advantage, at least with the iPhone's current generation, is all but gone. But it will reemerge when the next iPhone spawns a second round of innovation to tap into new device capabilities. This could involve its rumored speech-to-text processing, for example.

When this happens, remember the lessons learned from watching this first batch of success stories. In other words, keep in mind what Apple told us a decade ago, albeit under a completely different context: Think different. **MLM**