January 24, 2011

2011 Mobile Trends

by Thomas Husson and Julie A. Ask
for Consumer Product Strategy Professionals

January 24, 2011

2011 Mobile Trends

by Thomas Husson and Julie A. Ask
with Mark Mulligan, Charles S. Golvin, Ian Fogg, and Annie E. Corbett

EXECUTIVE SUMMARY

For consumer product strategy professionals who want to engage with their customers in the mobile environment, navigating the complex mobile ecosystem with its many different devices, platforms, and operating systems (OSes) — and which now includes tablets and other connected devices — will continue to pose challenges. With the traditional hype around technologies that will emerge in 2011, such as 4G networks like LTE, Near Field Communication (NFC), bar codes, and augmented reality, it is also challenging to figure out the real business opportunities. Forrester believes that the mobile/social/local "combo" will drive lots of innovation and growing consumer adoption but not real revenues — yet. The focus for companies willing to tap into the growing mobile opportunities should be on moving from experimentation to the creation of a mobile business case and strategy, while recognizing that the challenges associated with fragmentation will persist.

TABLE OF CONTENTS

2 **2010: A Recap**

6 **Ten Key Trends Shaping The Market This Year**

RECOMMENDATIONS

9 **Don't Follow The Technology Hype; Build Your Own Mobile Case**

NOTES & RESOURCES

This document is a review of the mobile trends of 2010 and a prediction of the trends for 2011.

Related Research Documents

"2010 Mobile Trends"
January 13, 2010

"Predictions 2010: Consumer Mobile Strategies"
January 7, 2010

2010: A RECAP

Back in January 2010, Forrester published two reports outlining our predictions for consumer mobile strategies and key mobile trends.[1] How did we do? Overall, a "B+." We did well predicting emerging technology trends, but we expected mobile strategy professionals to spend more. We also anticipated more disruption from new players from outside the telecommunications ecosystem. To simplify the review and grading process, we sorted about 20 trends and predictions into the following four categories: disruptive forces in the mobile ecosystem; emerging technology trends; consumer use of mobile devices for commerce; and company spending on mobile services. We graded each prediction from A (excellent) to F (total miss) (see Figure 1). We then created a composite grade for each category. Let's step back and look objectively at the trends we highlighted a year ago:

- **New entrants disrupting existing mobile ecosystems.** Grade B. Nontelco companies such as Apple, Facebook, and Google increased in importance as key players in the mobile ecosystem. Together, Apple and Google are closing in on controlling about half of the smartphone market and mobile advertising share in the US and obtained a lot of traction in Europe and other regions of the world.

- **Emerging mobile technologies enabling innovative services.** Grade A-. Innovation in mobile devices has been tremendous in the past few years. Mobile devices, including smartphones and tablets, are delivering experiences that resemble those on PCs just a few years ago. Three key technology trends played out as anticipated in 2010. First, devices and operating systems (OSes) fragmented: In 2010 alone, several operating systems launched — e.g., Microsoft's Windows Phone 7, Samsung's Bada, Symbian 3 — kicking off the OS war. Second, Android emerged as the main rival to other platforms, but its fragmentation also increased. Embraced by LG, Motorola, Samsung, and Sony Ericsson, among others, Android is the platform that gained the most traction in the market. Wide availability across service providers has helped push adoption. However, several versions of Android are now shipping, making it more complex for application developers to port their apps to numerous devices with different screen sizes.

  Third, social and location are becoming integrated in many mobile services. Few applications today don't ask a user for her location, even if the only purpose is more targeted marketing. Facebook added Places instantly, giving its 200 million mobile users the chance to "check in." Foursquare grew to 5 million users globally in 22 months.[2]

- **Consumers increasing their use of mobile phones for commerce.** Grade B. Even if the supply side still drives the market, with numerous mobile commerce services launched in 2010, consumers turned to their mobile phones as shopping tools and began spending money faster than we and many of our clients anticipated. Across industries, companies reported strong increased spending among consumers via their cell phones; eBay anticipated the highest absolute growth, with its projections of up to $2 billion in 2010.[3] Consumers also increased their use of tools such as bar code scanners, price-comparison services, and consumer reviews.

- **Mobile product professionals increasing their spend.** Grade B+. Companies that didn't even have a budget for mobile two years ago don't blink at seven-figure budgets today. Outside of a handful of industry leaders, however, Forrester feels that companies have not allocated enough money to mobile given the significance of the medium as the most ubiquitous digital channel. The most dramatic increase has been that in mobile marketing. Forrester revised its 2010 mobile marketing forecast by more than 50% for 2010 alone.[4] In a Forrester survey of mobile executives in Q3 2010, 24% of executives in charge of their company's mobile strategy reported that they would more than double their spending in the upcoming year and an additional 46% said that they would increase their budget.[5]

Figure 1 A Review Of Forrester's 2010 Mobile Trends

1-1 New participants in the mobile ecosystem have caused disruption

A — Excellent B — Good C — Average D — Poor F — Total miss

2010 trends and predictions		Comments
New entrants disrupting the mobile ecosystem		
Google will shake up the mobile navigation ecosystem.	B	Nokia responded to Google's announcement by offering Ovi Maps for free. A growing number of operators are now offering their services for free and are trying to include more premium services to differentiate their offerings.
Live TV will be hyped . . . again.	C	Forrester expected the 2010 FIFA World Cup to raise some buzz for broadcasting solutions but no meaningful adoption to follow. Except for some African countries, the hype did not take place; Flo TV even announced the shutdown of its service
Application stores will continue to flourish, but none will replicate Apple's success in 2010.	A	Many stores have opened up in 2010. However, with more than 7 billion downloads since launch and more than 300,000 apps available, the Apple App Store is still unrivaled. Followers GetJar and Android Market passed the 1 billion download mark during 2010, while Nokia's Ovi is now delivering 3.5 million downloads a day
The controversial "Net neutrality" debate will move to mobile.	B	No new regulation was implemented, but discussion took place between the various telecom stakeholders. In Europe in particular, where the neutrality issue is newer than in the US, operators are proving that their networks are a scarce resource and that they bought spectrum with the understanding that they could set pricing and their own terms of use.
Some operators will want to reduce the increasing dependency on Apple.	A+	In the US, AT&T promoted alternatives to the iPhone, and many European operators also pushed for Android devices, fearing that too high a consumer demand for the iPhone could dilute their differentiation; the fear of being bypassed by Apple's ecosystem was more than real.

57183 Source: Forrester Research, Inc.

Figure 1 A Review Of Forrester's 2010 Mobile Trends (Cont.)

1-2 Platform fragmentation will continue while emerging technologies are enabling new services

A — Excellent B — Good C — Average D — Poor F — Total miss

2010 trends and predictions		Comments
Emerging mobile technologies enabling innovative services		
The operating systems (OS) arms race will heat up.	A	In 2010 alone, several operating systems were launched, kicking off the OS war. Samsung launched Bada, Nokia launched Symbian 3, and Microsoft launched Windows Phone 7.
Android will emerge as a rival to other platforms but will also be a fragmented platform.	A	The number of daily activations of Android devices almost tripled from 65,000 to 300,000 between February and December 2010.
Innovation in mobile payments will accelerate.	B	Innovative startups, such as Boku and Zong, obtained lots of attention, while app billing and in-app payments to pay for digital goods saw lots of interest. In some emerging countries, money proximity payments and money transfers are now a mass-market reality — for example, M-Pesa in Kenya.
Location will start enabling richer mobile experiences.	B	Foursquare passed the 5M user mark. Facebook launched Facebook Places instantly, and a growing number of retailers and brands are now starting to make the most of mobile devices' GPS capabilities to provide value-added services.
Social Computing and mobile phones will expand their love affair.	A	Facebook's mobile growth skyrocketed from 65 million to 200 million global monthly users between September 2009 and December 2010.

1-3 Consumers increased their use of mobile phones for research and shopping

2010 trends and predictions		Comments
Consumers increasing their use of mobile phones for commerce		
Consumers will buy and sell goods on their phones.	A	eCommerce companies surveyed by Forrester in the summer of 2010 expected 2% of their online sales to be transacted via mobile. eBay alone is expecting $2 billion to be transacted via mobile — up from $400 million in 2009.
Consumers will begin to rely on and expect alerts.	B-	In 2010, 34% of US adults with cell phones received SMS alerts.
Social will intersect with mobile on yet another dimension — retail.	B-	In Q2 2010, 13% of US adult online cell phone owners accessed consumer reviews on their cell phones.
A rising tide will lift all boats — leading to increased consumer awareness of mobile services.	B	Promotion of mobile services beyond Apple's commercials is prevalent on bus stops, on buses, in TV commercials, etc. 21% of European mobile owners consider "apps" to be an important feature when choosing a new handset.

57183 Source: Forrester Research, Inc.

Figure 1 A Review Of Forrester's 2010 Mobile Trends (Cont.)

1-4 Companies increased their spending on and resource allocation to mobile initiatives

A — Excellent B — Good C — Average D — Poor F — Total miss

2010 trends and predictions		Comments
Mobile product professionals increasing their spending		
• Budgets for mobile initiatives will grow substantially. • Mobile brands will invest in mobile, and buzz around apps will continue.	B	According to Forrester's Q3 2010 Global Mobile Maturity Online Survey, 70% of companies interviewed plan to increase their mobile budgets in 2011. Among these, 26% plan to double or triple it. Among online retailers, companies reported an average mobile investment to date of $129,000 with an average of $170,000 planned for 2010. Large entities are spending well into the millions of dollars annually.
Consumer spending on cell phones will bring more dollars to mobile marketing.	A	In 2008, Forrester forecast total media spend for mobile display ads and search in 2010 to be $561 million. In 2010, we increased that forecast to $815.9 million for 2010.
Organizations will have dedicated mobile staff.	B-	According to Forrester's Q3 2010 Global Mobile Maturity Online Survey, 44% of executives reported approximately one employee or less worked full time for their company's mobile efforts globally.
• Consumer brands will reinvest in mobile websites. • The mobile Internet will be bigger than you think.	A	According to Forrester's Q3 2010 Global Mobile Maturity Online Survey, 47% of executives interviewed reported they have an optimized mobile website and 41% plan to have one.
Companies will focus first on their most loyal or high-value customers.	B+	Among companies surveyed by Forrester in Q3 2010, 52% cited increased customer engagement as one of their top three priorities.

57183 Source: Forrester Research, Inc.

TEN KEY TRENDS SHAPING THE MARKET THIS YEAR

We expect all of the trends mentioned above to continue throughout 2011. In addition, we expect 10 new trends to affect the market.

1. **Use of the mobile/social/local combination will explode but will generate little revenue.** We expect location-based social networks to struggle as standalone activities as mainstream online players, such as Facebook with Places instantly, integrate location into their services. Advertising revenue streams will follow these growing mobile audiences but so will privacy concerns, as it is difficult to engage directly with customers in situations that are intrinsically personal and intimate. Many geo-targeted mobile promotions or couponing campaigns will launch next year. Interesting and powerful initiatives will leverage targeted ads based on users' location histories and social graphs. However, location-based advertising will not generate meaningful revenues in 2011.[6]

2. **2011 will be the year of the "dumb" smartphone user.** Smartphones will become more and more affordable; thanks to handset subsidies, they will be available to the masses. These new smartphone users are likely to be less engaged and active than the first cohorts of Android and iPhone early adopters. The increased number of less frequent/active new smartphone users will dilute these phones' effect compared with 2010; for example, we expect them to download fewer apps on average. And if unlimited mobile data plans come to an end, there is a risk of even higher usage dilution if operators fail to market correctly their new metered pricing structures. The good news is that thanks to customer education and the convenience that these devices offer, even "dumb" smartphone users will consume more mobile media than ever before and will show incremental usage of mobile data.

3. **The mobile fragmentation problem will continue in 2011.** The majority of consumers around the world do not own smartphones yet. Companies can engage with them in many different ways and via many different technologies — including good old SMS. In the West, we expect smartphones to become mainstream, and Android is likely to continue to gain traction due to its broad availability and lower-priced devices. In Europe and in regions of the world such as Africa and Asia, Symbian devices will remain important — even though their significant number of users often show lower engagement.[7] Fragmentation is here to stay. Your customers own many different devices that rely on different development environments. Companies planning to reach mass-market audiences via mobile apps will not find relief in 2011. Why? The multiple versions of the same OS, different screen sizes, and high number of devices mean that the costs of porting, maintaining, and promoting apps will remain high. Prioritizing mobile developments will still be a challenge, and cross-platform development has not yet been achieved successfully.[8]

4. **The apps versus mobile Internet debate will continue — and remain irrelevant.** This isn't a question of either/or — but both. Frequent and intense users of services such as banking and brokerage will expect curated experiences in the form of apps. The Internet will be the

fallback for more occasional information and service needs as well as for those devices on which most apps are not available, such as quick messaging devices. Mobile product and service professionals frustrated by the high costs of native app development and maintenance and dissatisfied with the limited reach of the Apple and Android platforms among the overall mobile population should rely more on the Web. Even if HTML5 does not scale within the next two to three years, mobile browsing experiences are improving: Mobile services professionals can't afford to sit on the "app sidelines" until then if they are targeting the SuperConnecteds or Entertainers, as defined in Forrester's mobile POST framework.[9]

5. **Mobile marketing spend will surpass $1 billion as consumers spend billions via mobile.** Forrester expects marketers around the world to finally allocate dedicated resources to mobile. In the US, for example, Forrester forecasts that marketing spend on mobile display ads and search will pass $1 billion in 2011.[10] Marketers will find quantifiable ROI as mobile becomes a medium capable of generating real leads, driving foot traffic into stores, and selling products and services. Smartphone adoption is growing and with it activities typically associated with PCs, such as researching products, booking hotels, trading stocks, finding nearby restaurants, or simply browsing the Internet. Consumer product and service companies will also need to promote their mobile content and services. No longer citing an inability to reach their customers as a reason to hold back, marketers will take advantage of the growing audience, targeting it better through location and behavior, as well as using richer media formats, such as video.

6. **Mobile will increasingly prompt consumers to interact with their physical environment.** Technologies are already helping bridge the real and digital worlds via mobile devices. 2011 is — finally — the year that NFC begins to matter.[11] The market will finally move away from the trial stage in regions where NFC infrastructure is in place. Barriers such as consumer demand, market education, and business model issues need to be removed for the market to really take off.[12] Other technologies, such as QR codes and mobile augmented reality (AR) apps, will also prompt consumers to hold up their smartphones to interact with the world around them. These initiatives are likely to remain niche but will help raise consumer awareness of new forms of interaction via mobile devices. They will also offer a springboard for brands willing to experiment with the latest technologies.[13] Large search engines, such as Google, will still play a key role for consumers as an information source, but with consumers doing less browsing on mobile phones than they do on their PCs but seeking more answers, they will turn to vertical apps with more curated experiences.[14]

7. **The attention paid to 4G will vastly outweigh the impact of these new networks.** TeliaSonera opened a Long-Term Evolution (LTE) network around Stockholm in 2010; Verizon launched 4G in the US at the end of 2010; and NTT Docomo launched LTE in Japan in December 2010.[15] We expect more operators globally to inform us of the launch of their 4G networks. There will be lots of buzz about these high-speed mobile broadband networks, which offer speeds up to 20 Mbps. However, we recommend that you ignore the hype. Why?

4G will have as little impact as 3G had when it launched in Europe and the US in 2003. It's taken nearly seven years for half of mobile phone subscribers in the US and Europe to have mobile phones on these networks. The service will primarily, if not exclusively, be available on USB keys; few LTE devices will be available for consumers before the end of the year.

8. **Companies will invest first in convenient services for customers; acquisition will come second.** In the hierarchy of benefits that mobile offers — revenue generation, cost savings, and convenience — convenience will reign for the next year. Consumers will engage with or download apps from brands that they trust. Mobile product and service professionals — particularly in the travel industry — will invest first to keep their most lucrative customers happy. The more direct financial returns realized through revenue gains and costs reduced or avoided will elude companies until consumers substantially adopt and use mobile services. A near-term focus on the financials as a primary motivator puts the cart before the horse. However, for some industries, particularly in the retail space, we expect more and more companies to reach seven figures in direct mobile transactions.

9. **Casual gaming will continue to lead the mobile charge for content companies.** Forrester has already highlighted how media companies have some of the most advanced mobile strategies.[16] Several news publishers that Forrester spoke with expect mobile to represent more than 20% of their total online audience. As they don't expect advertisers to follow consumers that quickly, they will need to generate new revenue streams. While PC-based paid content models remain stuck in a niche, mobile shows some promising signs, especially in games. The evolution of app developer ecosystems has turned smartphones into powerful gaming devices for the mass market, with surprise successes like *Angry Birds*.[17] The smartphone casual gaming market will continue to boom in 2011. In the premium mobile content space, we expect new business models based on subscriptions, microtransactions, and in-app billing to expand from gaming to other content categories, such as news and music. To better monetize their audiences, we expect firms to use new models based on cost per installation or download, leveraging a qualified, opt-in database of users.[18]

10. **The term "mobile" will mean a lot more than mobile phones.** Consumers are connecting more and more devices wirelessly to the Internet. Tablets emerged aggressively in 2010 with the launch of Apple's iPad; Forrester forecast sales of more than 10 million tablet devices in 2010.[19] Apple's competitors have been quick to both announce and launch products. Meanwhile, consumer adoption of other popular devices, such as eReaders, netbooks, and portable media devices, has grown. Apps and services must work across devices. Consumers will expect ubiquitous access to content and services, which requires the designers of these services to synchronize content, rely on the cloud, and maintain the consistency of the experience across devices. However, only mobile phones will sell in the hundreds of millions and are truly "pocketable," providing anywhere, anytime connectivity.[20]

RECOMMENDATIONS

DON'T FOLLOW THE TECHNOLOGY HYPE; BUILD YOUR OWN MOBILE CASE

To make the most of these 2011 trends, product strategists should:

- **Ignore the technology hype.** For years now, telecom technology acronyms have flourished — and will continue to do so. Following 3G, WiMAX, and DVB-H, it is now time for LTE, NFC, and mobile AR to take center stage. While these technologies are disruptive, they will take years to emerge. For example, many companies that have embraced mobile by jumping on the app bandwagon without thinking through its implications will soon discover that consumers ignore apps soon after download if they don't provide any real value. Think instead about how mobile can deliver clear consumer benefits via a convenient user experience.
- **Mature their mobile consumer approach.** A majority of companies either do not have a mobile strategy or are only just starting to build one.[21] Forrester believes that they must integrate mobile as part of their overall corporate strategy as a matter of some urgency. Those that claim to have a strategy in place can still find many ways to improve their approach and move to the next level of mobile maturity by mastering the four core mobile disciplines: strategy and vision; organization and implementation; measurement and metrics; and, only then, technology.[22]
- **Anticipate and measure the impact of their mobile initiatives.** To build your mobile business case, you need to measure the overall impact of your mobile initiatives. This is far from being just a marketing exercise: You must have a companywide conversation on mobile and make sure your IT teams are involved so that they can integrate the coming developments. For example, to move mobile couponing beyond the trial stage, you need to make sure that your points of sale are able to track coupons redeemed via mobile. To justify the ROI of mobile and improve your mobile services, you also need to integrate analytics solutions.
- **Define their mobile product and services' road map for the next 12 to 18 months.** Let's be realistic: The pace of change and innovation in the mobile space is simply too rapid for any company to define a road map for the next two to three years or beyond. However, you must define the next steps of your mobile initiatives and have a clear vision of which features and services you will release until mid-2012. This doesn't mean that you shouldn't create different scenarios for the next two to five years. On the contrary: Mobile is one of the most disruptive technologies today, and you should anticipate how mobile could affect your business in the years to come.

ENDNOTES

[1] Forrester published two reports identifying key trends in mobile and consumer mobile strategy. See the January 13, 2010, "2010 Mobile Trends" report and see the January 7, 2010, "Predictions 2010: Consumer Mobile Strategies" report.

[2] Source: "How Fast is Foursquare Growing?," PlacePunch, January 5, 2011 (http://placepunch.com/how-fast-is-foursquare-growing).

[3] Source: Dan Butcher, "EBay generates $2B in mobile sales in 2010," Mobile Commerce Daily, January 7, 2011 (http://www.mobilecommercedaily.com/2011/01/07/ebay-claims-mobile-sales-tripled-in-one-year).

[4] Mobile marketing dollars will near $2.8 billion, with mobile search and display each representing 6% of interactive marketing spend in 2015 as marketers get their footing in the rapidly growing mobile market. With 36% of total US consumers expected to use the mobile Internet by 2015, mobile search and display advertising spend will increase despite considerable challenges. See the October 27, 2010, "US Mobile Search And Display Forecast, 2010 To 2015" report.

[5] Source: Forrester's Q3 2010 Global Mobile Maturity Online Survey.

[6] Despite the huge amount of press attention following Google's tentative offer to acquire Groupon, we believe that geo-located mobile couponing will struggle to generate massive revenues. Later, once more firms understand its full potential and have mCommerce and mobile loyalty schemes in place, we're sure the market will take off.

[7] Too often, product strategies are built around the concept of the "smartphone" as an ideal target for mobile products. But unlike men, all smartphones are not created equal. Modern smartphones created in the post-iPhone era demonstrate much greater consumer usage of advanced data features, the mobile Internet, and apps than do older models. In Europe, this is particularly important due to the large installed base of Nokia Nseries and Eseries smartphones based on Symbian that are pre-iPhone-era designs. Before deciding upon a target mobile platform, product strategists must carefully weigh up the overall opportunity presented by each smartphone. To do this, firms must evaluate each smartphone brand based both on its current adoption and abilities and, equally importantly, an analysis of its likely future evolution and future consumer adoption. See the April 14, 2010, "Target Smartphones" report.

[8] A number of vendors are promoting cross-platform development of mobiles services, including AnimApp, Appcelerator, Grapple, MobileAware, Mobile Distillery, PhoneGap, Rhomobile, and Sencha. While some developments can be shared, companies need to be aware that such synergies work mostly for non-complex apps and that user experiences still need to be optimized for various platforms and devices. According to various vendors, the incremental cost of updating an app for the newest version of the same OS is usually between 10% and 30%. In addition, companies should not underestimate the cost and time of managing multiple projects internally.

[9] SuperConnecteds and Entertainers are the two most sophisticated categories of mobile users in Forrester's Mobile Technographics® framework. Entertainers listen to music, watch video, or play games at least weekly; SuperConnecteds use the Internet at least weekly and are the most likely to engage with a broad

range of applications and more complex services. See the September 28, 2010, "US Mobile Technographics®: 2010" report, see the October 6, 2010, "Canada Mobile Technographics®: 2010" report, see the November 1, 2010, "Europe Mobile Technographics®: 2010" report, and see the January 18, 2011, "Asia Pacific Mobile Technographics®: 2010" report.

10 To be precise, we expect mobile search and display to reach a combined $1,145.5 million at the end of 2011. See the October 27, 2010, "US Mobile Search And Display Forecast, 2010 To 2015" report.

11 Forrester expects several manufacturers to ship devices with contactless technologies in 2011, thereby opening up new opportunities for mobile payments and mobile marketing. Forrester predicts dozens of millions of devices will ship in 2011. On December 6, 2010, Google announced that it will partner with Samsung to deliver the Nexus S — the first Android phone embedding a NFC chipset; this is positive news for the NFC mobile ecosystem. However, our understanding is that Android v2.3 — the current version — does not support NFC transmission and so cannot support NFC-based mobile payments yet. It needs an update to Android. Source: Andy Rubin, "Introducing Nexus S with Gingerbread," *Official Google Blog,* December 6, 2010 (http://googleblog.blogspot.com/2010/12/introducing-nexus-s-with-gingerbread.html).

12 Many firms in the mobile and financial arena in Europe want to replicate the success of Japan's mobile contactless payments. Many of them are focusing on leveraging a standardized technology — Near Field Communication (NFC). Forrester warns that mobile contactless payments won't hit the mass market for another decade for two main reasons. First, players throughout the value chain need to iron out unclear business models. Second, consumers need to change their existing payment habits, which will take time — and they haven't yet been given any reasons to change their behavior via marketing efforts focused on the benefits of contactless payments. However, NFC is much more than a mobile payment technology. It will enable a range of applications and services from various industries, linking together mobile marketing, mobile CRM, and mobile commerce. Consumer product strategists defining their mobile contactless payment strategy should take part in pre-commercial rollouts, closely monitor the evolution of the ecosystem, and focus on services to create the context for mobile payment uptake. See the July 28, 2009, "Mobile Contactless Payments In Europe: The Reality Beyond The NFC Hype" report.

13 Mobile augmented reality (AR) has become a widely referenced technology in less than a year, but in fact this technology is just emerging and will take years to scale. For now, it is primarily used by brands willing to launch innovative mobile services and in search of a "wow" effect. However, Forrester believes this is much more than a gimmick. In the years to come, it will be a disruptive technology that changes the way consumers interact with their environments. It will bridge the real and digital worlds, enabling new ways to engage with customers via advanced digital interactivity. Because mobile AR makes the most of mobile's unique attributes, it will help transform mobile phones into the new remote control of our personal daily lives. Consumer product strategists should benchmark innovation in this space very carefully, conceive their mobile services as if the technology were already mature, but integrate it very cautiously in their 2011 mobile road maps. See the December 17, 2010, "Mobile Augmented Reality" report.

14 Tablets are the next important computing form factor. To keep its products front and center, Microsoft needs a partner to produce a successful Windows tablet that competes with the Apple iPad. At stake is nothing less than the future of the operating system (OS): For Microsoft to remain relevant to consumers,

it needs to adapt its operating system to new form factors beyond the traditional PC. A Windows 7 tablet can only compete if Microsoft embraces Curated Computing by providing a simple, streamlined, guided experience for consumers, drawing on the design strengths of other Microsoft products like the Zune HD and the Kin. A Microsoft tablet that synchs with the Xbox 360 — with all the implied benefits, including the Natal interface — would be a killer hub for the digital home, enabling back-and-forth streaming of videos and games that one-ups the capabilities of the iPad and makes Microsoft relevant for the next decade. See the May 27, 2010, "The Windows 7 Tablet Imperative" report.

[15] Source: Kevin C. Tofel, "NTT DoCoMo Launches 75 Mbps LTE: Merry Christmas, Japan!," GigaOM, December 29, 2010 (http://gigaom.com/mobile/ntt-docomo-launches-75-mbps-lte-merry-christmas-japan/).

[16] To help consumer product strategists and executives benchmark their mobile consumer strategy, Forrester conducted a global mobile strategy maturity online survey among executives. Fifty-seven percent of the executives interviewed either do not have a mobile strategy or are just beginning to define it. Few have implemented best practices. This report shares the key results of this executive survey; we will shortly produce a mobile maturity model to help strategists improve the performance and integration of the emerging mobile platform. See the October 18, 2010, "How Mature Is Your Mobile Strategy?" report.

[17] *The New York Times* wrote about *Angry Birds,* the gaming phenomenon of the year. The game has so far generated $8 million on the iPhone and is likely to generate $1 million in advertising per month on Android devices. Source: Jenna Wortham, "Angry Birds, Flocking to Cellphones Everywhere," *The New York Times,* December 11, 2010 (http://www.nytimes.com/2010/12/12/technology/12birds.html?_r=2).

[18] For example, AppGratuites is a service, based on email distribution lists, that enables consumers to receive a newsletter with the latest or most relevant apps. Visit the AppGratuites website at http://appgratuites.com/ for more information.

[19] Product strategists are struggling to make sense of the tablet opportunity: Will there be a market for tablets beyond Apple's iPad, and if so, how big will it be? In this report, we present data from Forrester's newly updated tablet forecast and share our perspective on market drivers and the competitive landscape. Our call: The tablet market will grow rapidly, reaching 10.3 million US consumers in 2010 and 82 million in 2015. As the tablet market grows, product strategists must nurture both the app ecosystem and the browser environment — both will be key channels for delivering content experiences on tablets. See the January 4, 2011, "Tablets Will Grow As Fast As MP3 Players" report.

[20] For more information about smartphones and the need to synchronize content and services across devices, see the July 7, 2010, "Consumers Need Cloud-Based Products Now" report.

[21] To help consumer product strategists and executives benchmark their mobile consumer strategy, Forrester conducted a global mobile strategy maturity online survey among executives. Fifty-seven percent of the executives interviewed either do not have a mobile strategy or are just beginning to define it. Few have implemented best practices. This report shares the key results of this executive survey; we will shortly produce a mobile maturity model to help strategists improve the performance and integration of the emerging mobile platform. See the October 18, 2010, "How Mature Is Your Mobile Strategy?" report and see the April 9, 2009, "The POST Method: A Systematic Approach To Mobile Strategy" report.

[22] Everyone needs a mobile strategy, but what is the right approach and what are the appropriate objectives and metrics? To help product strategists and executives in charge of defining their company's mobile consumer approach build winning mobile strategies, Forrester has created a mobile maturity model. Forrester can use this model to help companies identify into which of four maturity levels they fall: Novices, Experimenters, Practitioners, or Models. Best practices for maturing to the next level will vary by phase. However, mobile strategists should move gradually from one level of maturity to the next, benchmark their maturity against industry peers, promote their mobile successes internally, and adopt new technologies only when they resonate with business objectives and customer behavior. See the December 6, 2010, "Forrester's Mobile Maturity Model" report.

FORRESTER®

Making Leaders Successful Every Day

Headquarters

Forrester Research, Inc.
400 Technology Square
Cambridge, MA 02139 USA
Tel: +1 617.613.6000
Fax: +1 617.613.5000
Email: forrester@forrester.com
Nasdaq symbol: FORR
www.forrester.com

Research and Sales Offices

Forrester has research centers and sales offices in more than 27 cities internationally, including Amsterdam; Cambridge, Mass.; Dallas; Dubai; Foster City, Calif.; Frankfurt; London; Madrid; Sydney; Tel Aviv; and Toronto.

For a complete list of worldwide locations visit www.forrester.com/about.

For information on hard-copy or electronic reprints, please contact Client Support at +1 866.367.7378, +1 617.613.5730, or clientsupport@forrester.com.
We offer quantity discounts and special pricing for academic and nonprofit institutions.

Forrester Research, Inc. (Nasdaq: FORR) is an independent research company that provides pragmatic and forward-thinking advice to global leaders in business and technology. Forrester works with professionals in 19 key roles at major companies providing proprietary research, customer insight, consulting, events, and peer-to-peer executive programs. For more than 27 years, Forrester has been making IT, marketing, and technology industry leaders successful every day. For more information, visit www.forrester.com.

FORRESTER®