Mobile Is The New Face Of Engagement: An Executive Summary

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WHY READ THIS REPORT

This report summarizes the 28-page Forrester report "Mobile Is The New Face Of Engagement." By 2016, smartphones and tablets will put power in the pockets of a billion global consumers. However, mobile is not simply another device for IT to support with a shrunken website or a screen-scraped application. Rather, mobile is the most visible manifestation of a much broader shift to new systems of engagement that help firms empower their customers, partners, and employees with context-aware apps and smart products. Read this executive summary to learn more about the impact of mobile engagement on the technology organization and supplier ecosystem, on task-oriented experience design and the subsequent atomization of business processes, and on the way the IT stack must be re-architected for wireless delivery.

A BILLION MOBILE COMPUTING DEVICES REQUIRE NEW SYSTEMS OF ENGAGEMENT

Mobile is not merely another chapter in the smaller, faster, cheaper device story. And it's not tiny web or screen-scraped PC applications. Instead, mobile is the flash point for a holistic, far-reaching change. Your app is in your customer's pocket. Now what are you going to do? The answer is to engage your customers and employees in their immediate context using what Geoffrey Moore has termed "systems of engagement" that:

> *Empower customers, partners, and employees with context-rich apps and smart products to help them decide and act immediately in their moments of need.*

Systems of engagement are different from the traditional systems of record: They focus on people, not processes (see Figure 1). They draw on mobile, social, cloud, and big data innovation to deliver apps and smart products directly in a customer's context. Instead of screen scraping the hotel reservation system and calling it a mobile app, a system of engagement on a smartphone will know that a guest has entered the lobby for the first time and probably wants to check in. And using location data from the device, the "system" will know that a guest is entering her room and will default to the room service ordering app. With mobile apps as the visible face for systems of engagement:

- **Customers interact directly with the organization in their moments of decision.** Mobile apps and sites (we call them all "apps" here) let people act — and offer feedback — in those moments. It's why 25 of the top 30 online US retailers have built native iPhone apps — to capture mobile retail revenue as it balloons from $6 billion this year to $31 billion by 2016.

- **Partners employ your tools in the context of their daily workflow.** Mobile apps — particularly tablet apps — let firms engage partners in their daily workflow without stopping to fire up a computer. For example, General Electric's (GE's) tablet app knows which wind turbine a customer is standing by so it pulls up the right maintenance schedule.

- **Employees collaborate and make key decisions anywhere on any device.** With data dashboards on iPads, executives at Kraft Foods make decisions during a meeting rather than a day later. Empowered by mobile collaboration tools from vendors like Box, Dropbox, Evernote, and Google, staff leave laptops at home and remain connected and productive.

- **Offline products get wired with APIs and mobile app extensions.** Engagement is also about smart products. Sensors, radios, processors, and wireless access allow Miele to build smart dishwashers and Caterpillar to ship smart tractors. Mobile apps are the controllers and product extension. For example, Withings has reinvented the bathroom scale with Wi-Fi connectivity and app APIs and attracted an ecosystem of more than 30 healthcare management apps that extend the value of the product.

Figure 1 Systems Of Engagement Touch People And Products

1-1   **Systems of engagement are the future of technology-led business innovation**

Customers

Partners

Smart products

Employees

Systems of engagement touch people

- Serving customer, partners, and employees
- Enabled by smartphones, tablets, and smart products
- Focused on in-the-moment tasks and decisions

- Delivering in an individual's personalized context
- Providing analytics-driven experiences
- Leveraging social and cloud technologies
- Short, rapid, iterative release cycles

Systems of record host processes

- Targeting employees
- Supported by ERP packages and large databases
- Recording transactions and accounting data as part of core business processes
- Maintain state, status, and history
- Long development and deployment cycles
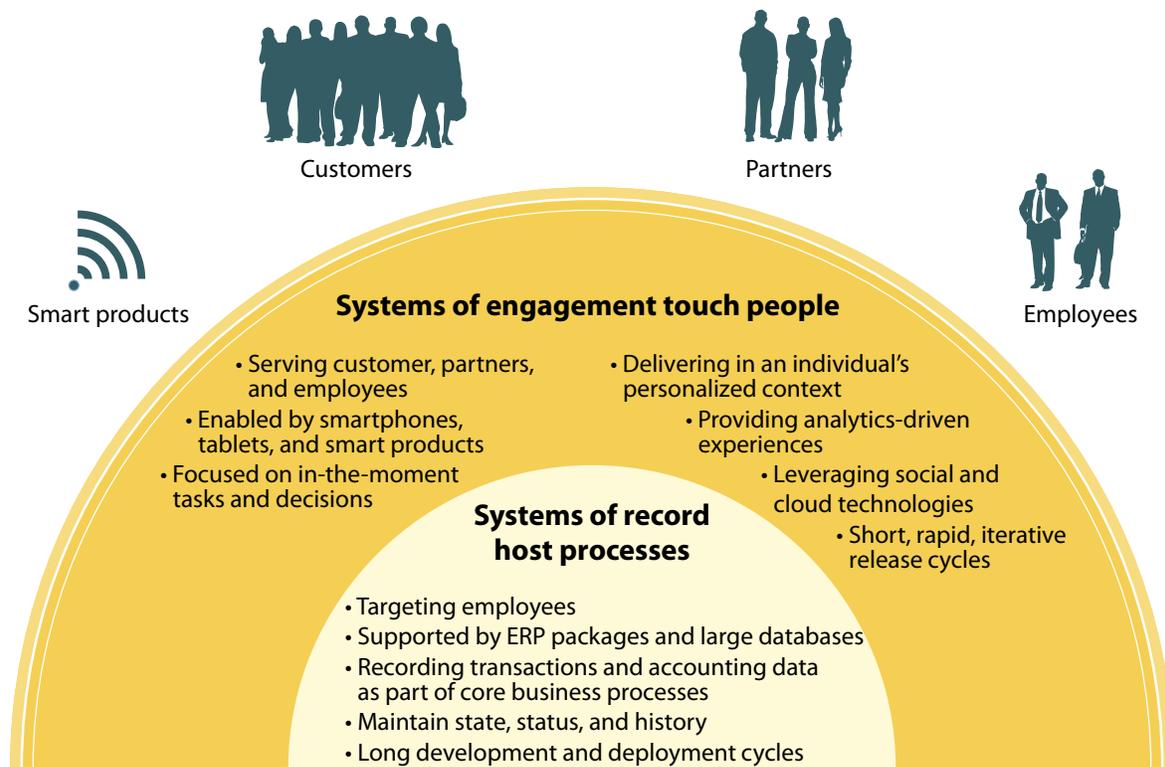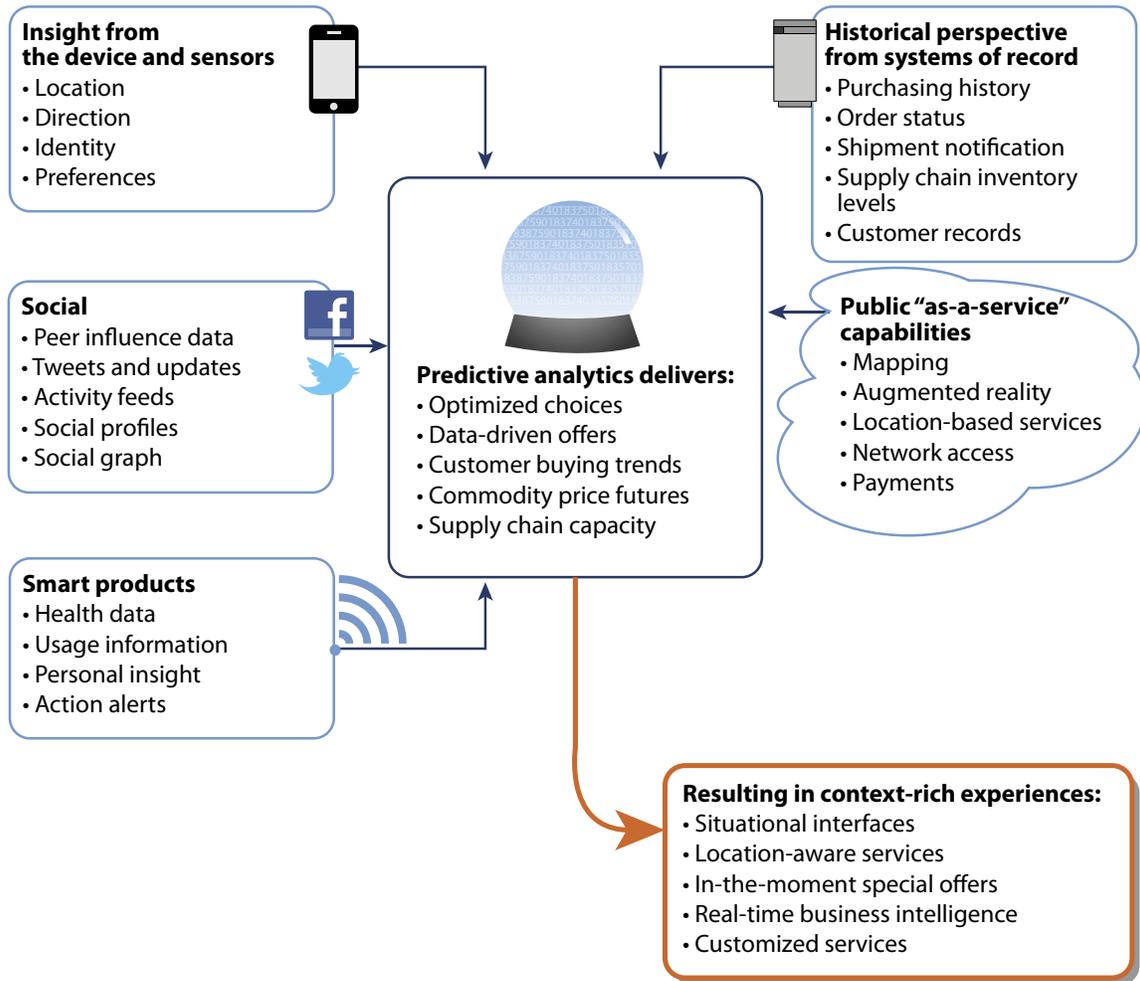
72121   Source: Forrester Research, Inc.

Figure 1 Systems Of Engagement Touch People And Products (Cont.)

1-2 **Systems of engagement use context to deliver a great mobile experience**

Insight from the device and sensors
• Location
• Direction
• Identity
• Preferences

Historical perspective from systems of record
• Purchasing history
• Order status
• Shipment notification
• Supply chain inventory levels
• Customer records

Social
• Peer influence data
• Tweets and updates
• Activity feeds
• Social profiles
• Social graph

Predictive analytics delivers:
• Optimized choices
• Data-driven offers
• Customer buying trends
• Commodity price futures
• Supply chain capacity

Public "as-a-service" capabilities
• Mapping
• Augmented reality
• Location-based services
• Network access
• Payments

Smart products
• Health data
• Usage information
• Personal insight
• Action alerts

Resulting in context-rich experiences:
• Situational interfaces
• Location-aware services
• In-the-moment special offers
• Real-time business intelligence
• Customized services

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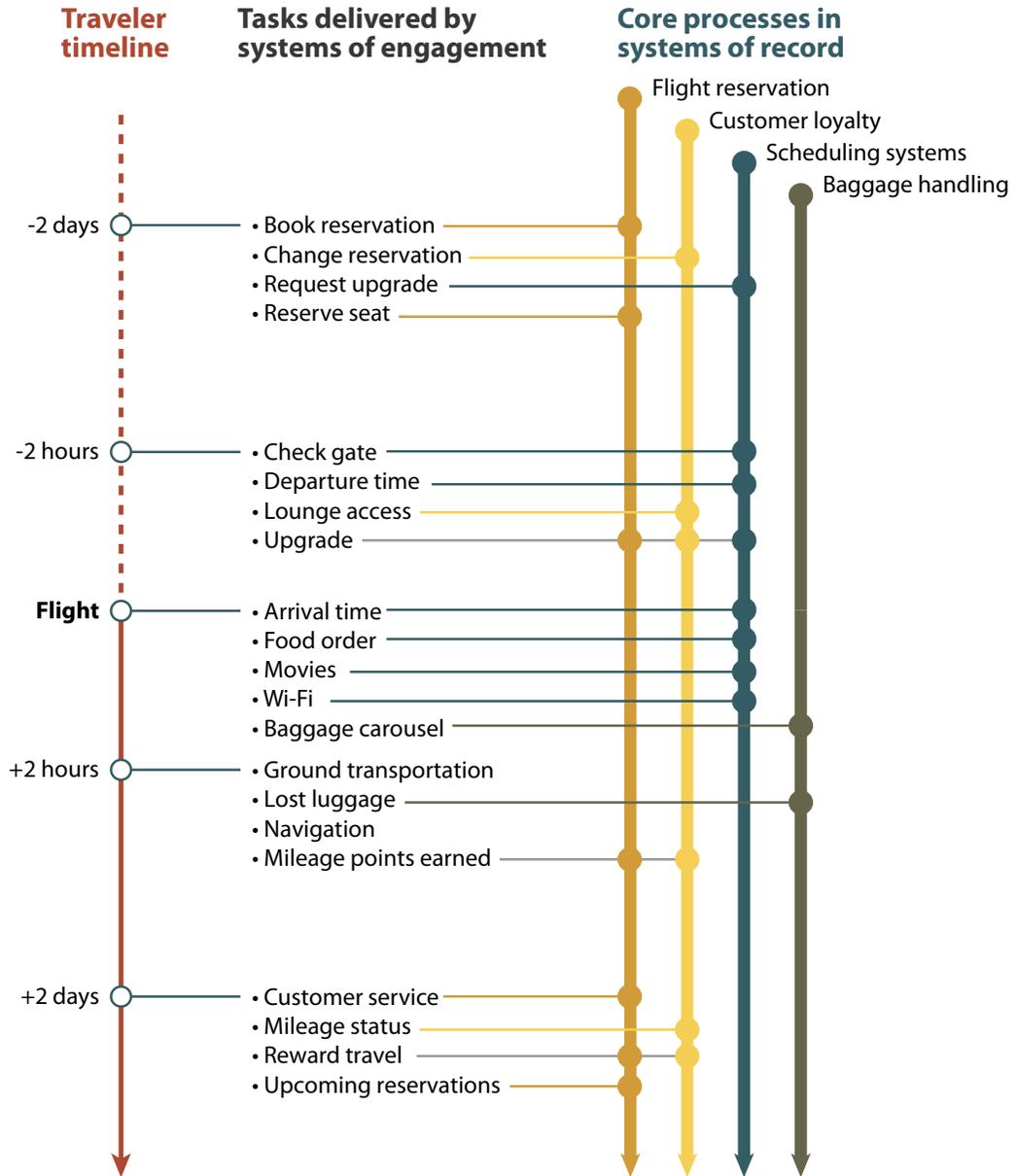Source: Forrester Research, Inc.

BEWARE OF MOBILE'S UNINTENDED CONSEQUENCES

Mobile apps can be wildly successful. For example, retail bank USAA saw its mobile banking contacts soar from a projected 20 million contacts per month to 120 million. While this success is great, the rampant demands of a successful app carry hidden costs. In our interviews with executives from 61 mobile innovators and technology firms, we heard many success stories, but five unintended consequences came through consistently as well:

1. **A multichannel coordination quagmire.** The Rubik's Cube problem of coordinating data, access, and applications across multiple channels gets more complicated as firms pursue mobile engagement. For example, one multichannel retailer built a mobile app that handled basic shopping tasks well enough, but it wasn't coordinated with the web and call center channels for marketing, customer onboarding, or customer service activities.

2. **Business processes designed for transactions, not engagement.** People expect to accomplish simple chores very quickly on their mobile devices. This task orientation forces what Forrester calls the "atomization" of business processes, requiring firms to break them down into convenient chunks to help people, for example, when they travel (see Figure 2). In the 1980s, ATMs did the same thing with banking tasks: customers checked a balance or withdrew money. Mobile apps will drive a similar atomization of business processes.

3. **Servers and infrastructure ill-prepared for exploding activity volumes.** The convenience of mobile apps and the atomization of processes lead to dramatic increases in activity. Just as we saw with ATMs, where the transaction volume skyrocketed from 41 million in 1978 to 11.2 billion in 1998, the same trajectory is happening with the processes accessed through mobile apps. Box, Pandora, salesforce.com, and Twitter already generate more than half of their traffic from mobile devices.

4. **Middleware, application, and security models poorly constructed for engagement.** The atomization of business processes will cascade down the entire technology stack. Mobile innovators have already been forced to rework their service-oriented architecture (SOA) to reduce message traffic and overhead for services originally designed for PCs. IT will also have to move beyond perimeter security to a layered security model that protects data and applications at every step on the data path, including the source.

5. **Design, development, and governance processes misaligned with mobile requirements.** Great mobile apps are architected from the user experience in, not the database schema out. One bank learned this design lesson the hard way: It spent millions building a mobile app only to find it savaged in the app store. Mobile apps also dictate a slew of organizational and process changes: multiplatform development, project governance, and experience design among them. Finally, IT will have to manage the burgeoning mobile ecosystem.

Figure 2 Customer Tasks In An Atomized Business Process In The Travel Industry

Traveler timeline	Tasks delivered by systems of engagement	Core processes in systems of record
		Flight reservation
		Customer loyalty
		Scheduling systems
		Baggage handling
-2 days	• Book reservation	
	• Change reservation	
	• Request upgrade	
	• Reserve seat	
-2 hours	• Check gate	
	• Departure time	
	• Lounge access	
	• Upgrade	
Flight	• Arrival time	
	• Food order	
	• Movies	
	• Wi-Fi	
	• Baggage carousel	
+2 hours	• Ground transportation	
	• Lost luggage	
	• Navigation	
	• Mileage points earned	
+2 days	• Customer service	
	• Mileage status	
	• Reward travel	
	• Upcoming reservations	

72121   Source: Forrester Research, Inc.

CIOS NEED A MOBILE STRATEGY TO BUILD NEW SYSTEMS OF ENGAGEMENT

To avoid mobile's unintended consequences and successfully engage customers, partners, and employees through mobile apps, CIOs will need to rethink IT's role, responsibilities, and skill sets. Just as the PC necessitated an organizational shift from data processing to IT, mobile apps front-ending systems of engagement will act as a catalyst for the reinvention of IT as business technology. Business technology is a fundamental asset and strategic resource in business innovation and operations. CIOs should go beyond a myopic focus on employee mobile apps to also take on the role of business technology reformer for customer apps.
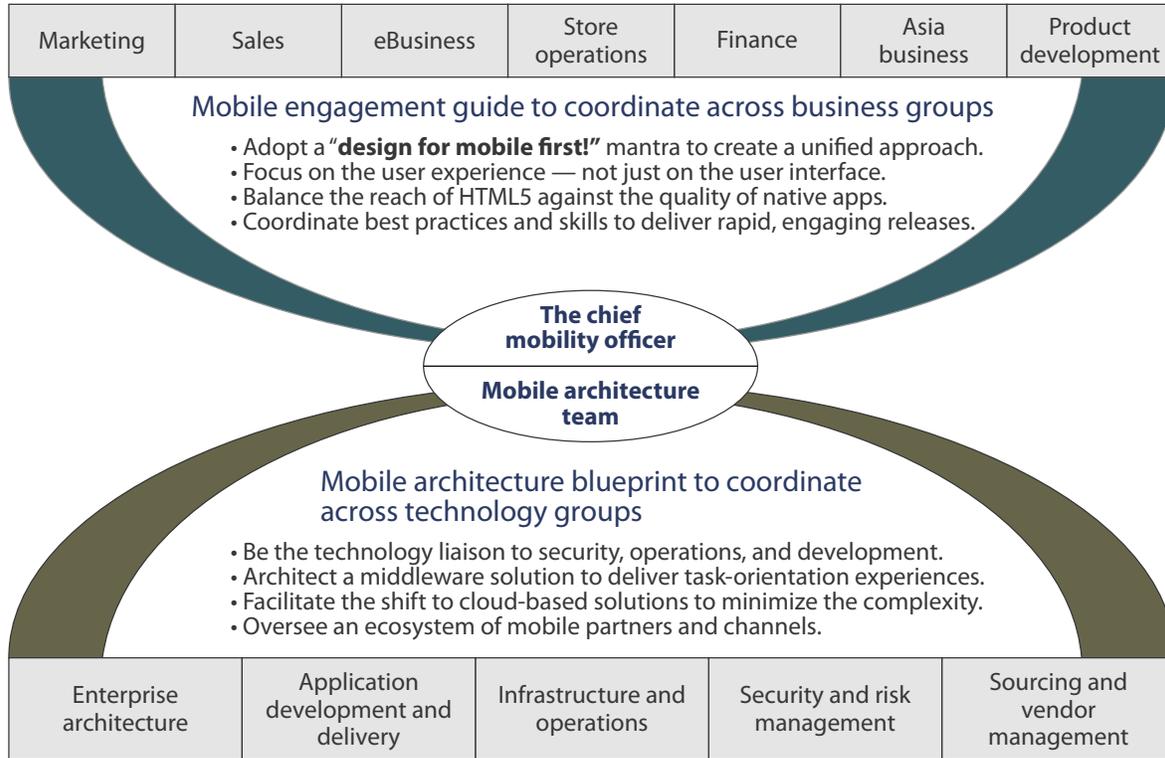
The Chief Mobility Officer (CMOO)

To balance the needs of business owners building mobile apps against the technology requirements to service those apps, Forrester asserts that the first step in the CIO's mobile strategy is to create the role of chief mobility officer and a supporting mobile architecture team (see Figure 3). This specialized 10- to 30-person group sits between business groups and IT and is comprised of technology and business staff.

The CMOO and the mobile architecture team are the coordinating force across all mobile business and technology projects and an incubator for the culture of the emerging business technology organization. Without this group, firms will waste time and money as marketing goes after a mobile loyalty app, sales builds tablet apps, the CFO implements mobile expense approvals, the CTO builds a smart product app, and the head of Asia resellers builds a mobile dealer app. The two key outputs of the chief mobility officer are:

- **The mobile engagement guide to coordinate mobile business projects.** At the top of the CMOO's to-do list is to create a mobile engagement guide to facilitate work across various business teams. This handbook carries the "Design For Mobile First!" mantra to ensure that every business and technology team knows that mobile engagement is not business as usual. The development of the guide itself will draw out the best practices from every business group investing in mobile and tablet apps.

- **A mobile architecture blueprint to manage technology investments.** The mobile architecture blueprint lays out the technology-centric issues that IT must solve in order for mobile engagement apps to work. The mobile architecture team is more about orchestrating the work of others than building apps, but it carries a clear and important set of responsibilities.

Figure 3 The Chief Mobility Officer Bridges Business And IT

Marketing	Sales	eBusiness	Store operations	Finance	Asia business	Product development

Mobile engagement guide to coordinate across business groups

• Adopt a "**design for mobile first!**" mantra to create a unified approach.
• Focus on the user experience — not just on the user interface.
• Balance the reach of HTML5 against the quality of native apps.
• Coordinate best practices and skills to deliver rapid, engaging releases.

The chief mobility officer

Mobile architecture team

Mobile architecture blueprint to coordinate across technology groups

• Be the technology liaison to security, operations, and development.
• Architect a middleware solution to deliver task-orientation experiences.
• Facilitate the shift to cloud-based solutions to minimize the complexity.
• Oversee an ecosystem of mobile partners and channels.

Enterprise architecture	Application development and delivery	Infrastructure and operations	Security and risk management	Sourcing and vendor management

72121 Source: Forrester Research, Inc.

WHAT IT MEANS

THE PAYOFF OF SYSTEMS OF ENGAGEMENT IS PROFITABLE GROWTH

Systems of engagement will fuel business growth and innovation over the next decade. The journey will require some jolting decisions and a sophisticated approach to solution development. But it is also inevitable. Mobile apps and smart products are the way companies, governments, and institutions will:

■ **Improve satisfaction, stickiness, and trust.** Walgreens reports that 40% of its online transactions come from its one-year-old mobile app. The investment in mobile systems of engagement that anticipate your customers' needs before they know they have them pays off in metrics that matter, starting with revenue.

■ **Serve customers at the lowest possible cost and instill in them a self-service habit.** Mobile apps and smart products offload people-directed service to self-service channels. If you decode your customers' task-oriented needs, you can be in their pocket every step of the way. And self-service is cheap by comparison. One large bank reports that mobile transactions are one-tenth the cost of branch transactions.

- **Increase business productivity and drive cost out of internal processes.** Mobile devices will front better systems of engagement that make employees productive in their down time on the go. With mobile as a catalyst, it's time to rethink how systems of engagement — everything from email and SharePoint to business processes and the data warehouse — will make every employee and internal process more effective and efficient.

- **Create significant new revenue sources from smart products and services.** Build smart product APIs to give developers access to the raw intelligence and value of the product. Two examples illustrate the point: The Withings Wi-Fi-connected smart scale has already cultivated an ecosystem of 30 mobile apps that turn it into a weight management tool. Siemens smart MRI machines take the worry out of operating failures by exposing the maintenance APIs.