

A REPORT BY HARVARD BUSINESS REVIEW ANALYTIC SERVICES

How Mobility Is Changing the Enterprise

Forward-thinking enterprises use mobile technology across their organizations to give employees, suppliers, and customers access to appropriate data when and where they need it.

WITH THE BOOM in smartphones and tablets, we are in the vortex of the technological shift from Mobile 1.0 to Mobile 2.0.

The zenith of the Mobile 1.0 explosion came late in 2008, when the sales of laptops surpassed the sales of desktop PCs for the first time. Enterprises had long before begun outfitting what they called “road warriors” with laptops—salespeople, field support personnel, and on-the-go executives—giving them access to inventory, documentation, and other databases. Simple wireless antennas, followed by built-in Wi-Fi, coupled with virtual private network software, made logging on anywhere and anytime almost as easy as it was in an office.

Later enterprises realized that by outfitting even more employees with laptop computers instead of desktop computers, even traditional office workers could improve their productivity. Employees could collaborate in conference rooms, in the offices of partners and suppliers, and in airports, no matter where their work took them.

History is about to repeat itself. Sometime in 2015, according to a Forrester Research forecast,¹ the sales of tablets will overtake laptops. If Mobile 1.0 was about the extension of corporate data to mobile devices, Mobile 2.0 is about innovation and transformation. “It’s all about wireless data,” says independent technology industry analyst Jeff Kagan, who specializes in mobile technology. “We’re in the early days of this new way of thinking about all these new devices. When these devices first came out, they were cool, they were fun. Now they are the way we work and communicate.”

This new evolution is not just about mobility; it’s also about mobile devices working in concert with back-end corporate systems. The IT industry is in the process of creating a dramatic and powerful new infrastructure, one where a handheld device has the horsepower to run many applications and crunch a substantial amount of data offline while relying on wireless connectivity to access huge data sets using beefy enterprise applications wherever they are.

According to the results of an online February 2012 survey by IDG Research Services, three drivers are accelerating the demand for mobile access to enterprise apps: executive demand, the increasingly mobile workforce, and customer’s demand for real-time information and action. [Figure 1](#)

Figure 1

What’s Driving Mobile Investment?

HOW IMPORTANT ARE THE FOLLOWING TRENDS AS DRIVERS OF INVESTMENTS IN MOBILE TECHNOLOGY AND SERVICES AT YOUR ORGANIZATION?

Executives need to access critical business information

54%

Workforce becoming increasingly virtual and mobile

51%

Employees and/or customers increasingly demand real-time information

49%

n=140

Source: IDG Research Services, 2012

These drivers are extending the boundaries of computing, not only in terms of where computing is done but also in terms of what computing can be done. The advent of cloud computing, in fact, is profoundly remaking those boundaries with new applications, flexibility, and efficiency. And even companies resistant to the public or private cloud concepts are providing mobile device access to enterprise applications.

Specific departments are already reaping the benefits of these expanding boundaries. According to the IDG survey, more than half of the respondents have deployed industry-specific mobile applications and half have deployed mobile apps for specific departments, such as finance, human resources, sales, or field service. In addition, almost half have deployed dashboards, access to analytics, and key performance indicator alerts on mobile devices. [Figure 2](#)

However, the advantages of providing mobile device access to enterprise apps extend beyond employees to customers. The same IDG survey found that 40 percent of companies are giving consumers access to actionable information via mobile devices. While almost everyone is familiar with banks and securities firms providing updates on account balances and transaction status, business-to-business access is booming too.

In addition, mobile device interaction through social networking sites provides new ways for customers to communicate and for companies to offer sales and marketing opportunities. Supporting this kind of interaction between customer and company increases customer intimacy, and at lower costs than human interaction would require.

The impact of mobility on lines of business has been pervasive; no department is immune from its effects. “Mobility is changing

how things are done,” says Daryl Schoolar, a principal analyst for infrastructure issues at Ovum Research. “It’s being driven by more devices and better devices, all of them bringing instantaneous and convenient computing.” Essentially, enterprises are using mobile technology not only to compress the time it takes for business processes, but also to provide highly accessible, accurate, and up-to-date information to help employees, partners, and customers make better decisions.

Indeed, the impact of mobile device access to enterprise applications is considered transformational by a substantial number of companies. According to the IDG survey, a majority of senior technology executives view it as transformational or strategic. [Figure 3](#)

Here’s how mobility is changing these key functional departments.

FINANCE. The *raison d’être* of any finance department resides in approvals, checks and balances, and audits—activities that can’t be left to computers and must happen on a timely basis. Mobile technology enables finance employees to act on their responsibilities quickly. So whether it’s a purchase order approval or a question about a regulatory compliance issue, communication via mobile technology keeps the enterprise moving forward. Enabling such responsiveness is especially crucial during specific, time-sensitive periods, such as end-of-quarter closings, or during budgeting cycles. The faster results are reported, the more accurate they are and the more reliable the decisions executives can make using them. That benefits both those in the finance department and line-of-business managers.

SALES. The same kind of access to up-to-date, accurate information benefits salespeople as well. Salespeople can both download and upload information during the course of their day, providing near-real-time inventory, orders, and shipping information to customers and the entire supply chain.

Further, by using a tablet or a smartphone rather than a laptop, salespeople are removing a physical barrier between themselves and their clients that can diminish intimacy. In fact, salespeople can more easily hand a tablet over to a client to demonstrate a specific feature of a product or review a bill of materials. The ease of interaction with a tablet adds an air of transparency to the sales process.

HUMAN RESOURCES. As with finance, a significant portion of human resources responsibilities relate to approvals and workflow: vacation requests, hiring, interview applications. Increasingly, it’s crucial to make an offer to the right applicants quickly to avoid losing them to another company. Mobile technology helps with these functions, but its applicability has far greater potential.

Giving employees access to information about their compensation and benefits reduces the need for human intervention on the part of HR and lets employees check that information from home or on the road. Indeed, mobile devices are radically transforming the arranging and rearranging of travel—changing hotel, rental car, or airline reservations while on the go provides enormous flexibility.

Figure 2

Mobile Apps Already Deployed

WHICH OF THE FOLLOWING TYPES OF MOBILE APPLICATIONS ARE DEPLOYED BY YOUR ORGANIZATION?

Industry specific (unique to your industry process) **58%**

Line of business (finance, HR, CRM, field service) **52%**

Productivity (approvals, time and expense) **51%**

Analytics (dashboards/KPIs) **46%**

Business to consumer (loyalty management, social media) **40%**

n=140 respondents who are involved in the purchase process for mobile technology and services

Source: IDG Research Services, 2012

By combining context and real-time analytics, mobility will truly transform the way we do business.

At the same time, mobile technology, especially tablets, provides excellent opportunities for learning and training. A recent IDG Global Solutions survey and report on mobile device use by more than 20,000 IT professionals, line-of-business managers, and consumers reported that almost half watched work-related video on their mobile devices. Interestingly, more of them watched more technology content after hours (68 percent) and on weekends (57 percent) than during business hours (40 percent).

Mobile technology aids HR in managing the interview process as well as providing quick access to social networking sites such as LinkedIn and Facebook to identify potential employees. In addition, mobile HR apps enable talent management by providing access to employee profiles and key performance indicator reports.

OPERATIONS. In the age of globalization, supply chains stretch around the world, and production managers expect to be kept apprised of significant issues relating to inventory and logistics. With mobile technology, manufacturing partners can notify executives through alerts, even if it's after normal working hours, to get instructions on how to proceed. This optimizes supply chain activities so that communication isn't delayed if it takes place at night or during the weekend.

Mobile technology has become invaluable across industries. "Pharmaceutical companies are using mobile to change the way they share data, capture orders, and track inventory," says Maribel Lopez, principal analyst of Lopez Research. "Up-to-date drug and compliance information can be pushed to tablets. Salespeople can view inventory availability, process sales, and record the dispensing of drug samples on a mobile device."

The result is faster receivables turnover, improved regulatory compliance, and more accurate data collection. But there are even more potential capabilities for operations, combining inventory information and customer data. Imagine a retailer with excess inventory at a specific location. The retailer could, via a tablet in the warehouse, send out a time-and-geography-based coupon to customers within a specific radius offering deals on that merchandise within the next 24 hours.

SERVICE. Another strategic integration point is mobile unified communications, which incorporates features such as the ability to know the availability of employees (presence) and contact them no matter where they are, using various methods (text message, phone call, or email).

Consider the scenario of a company selling highly complex equipment receiving a frantic call from a customer who needs assistance

Figure 3

IT's Perception of Mobile Technology

WHICH OF THE FOLLOWING BEST DESCRIBES THE PERCEPTION OF SENIOR IT AT YOUR ORGANIZATION REGARDING MOBILE TECHNOLOGY?

Transformational (a way to change how things are done)

42%

Strategic (a way to get things done while advancing organizational goals)

29%

Tactical (a way to get things done faster through productivity improvements)

25%

Source: IDG Research Services, 2012

immediately. The ability to reach a trained engineer in the field, who has access to detailed engineering drawings and other background information, can help resolve the issue in real time. Such service not only reduces customer downtime and support costs but also usually strengthens the bond between customer and supplier.

What Will Happen Next?

It's almost impossible to measure the ways in which mobile technologies might continue to affect the enterprise. Consider the increasing trend of employees bringing their own devices and the effect on IT budgets and capital expenses. Consider the ability of manufacturers, such as consumer products companies, that have traditionally been shut off from their end users because of their distribution methods—they can offer coupons to shoppers at the points of sale.

This is only the beginning. Sales, HR, finance, and service are just a few of the functional areas that are about to be transformed by mobile technologies. Virtually all departments across the enterprise can benefit by incorporating mobile technologies into their processes and workflows.

"What excites me most about mobility is the ability to inject context, such as location, time of day, and sensor data into business processes," notes Lopez. "By combining context and real-time analytics, mobility will truly transform the way we do business." ♦

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SANJAY J. POONEN
PRESIDENT AND
CORPORATE OFFICER,
GLOBAL SOLUTIONS
SAP

Enthusiasm for mobile technology in the workplace is at an all-time high. This trend began several years ago as eager consumers brought personal devices to work, and today it is businesses that are driving a faster-than-ever pace of mobile innovation in the enterprise.

Gone are the days when fears of security risks and unrecoverable IT effort kept companies from embracing mobile enterprise apps or limiting their investment to only email and calendars. Today, more than 70 percent of senior IT execs say mobility is transformational, strategic.

To reap the greatest advantage from mobility, organizations need to reach beyond productivity enhancement. Our customers are using SAP technology, not just to help employees do more in their downtime, but also to actually transform processes, experiences, and transactions at the very heart of their businesses. These applications improve customer engagement and create a tight feedback loop that leads to better decisions in less time. For example, Boston Scientific, a manufacturer of medical devices, is providing salespeople with video- and graphics-enhanced data about their products in the field, making it possible to give doctors a more accurate and in-depth understanding of how the products can help them save lives.

Some of the most startling transformations are happening within discrete lines of business. Sales, human resources, operations, and finance are among the internal organizations that are using mobile devices to make better decisions and create happier

customers, employees, suppliers, and partners.

SAP mobile apps are fueling these transformations within many leading organizations. We leveraged our decades of experience in helping lines of business streamline their processes and paired it with our mobile technology leadership to create dozens of mobile apps that are changing businesses for the better.

Take SAP Manager Insight, for example: This app, which lets managers easily surface the individual talents, attributes, and personnel files of every employee on a mobile device, improves the efficiency of strategic meetings and helps make sure the right people are placed in the right roles quickly. Likewise, finance officers can use SAP EPM Unwired while visiting job sites to gain critical, real-time insights into issues influencing profits and losses.

For SAP, the excitement and momentum around mobile technology has hit a fever pitch, and this is driven by our excitement at seeing our customers use our mobile apps to transform the effectiveness of their lines of business.

We invite you to learn more about SAP's mobile app offerings as well as those from our partner ecosystem by visiting the SAP Store from here: sap.com/mobile. You'll soon understand why SAP's mobile apps leadership is a critical driver of mobile transformation and innovation in a wide variety of businesses.

Sincerely,

Sanjay J. Poonen
President and Corporate Officer,
Global Solutions, SAP

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