IBM Institute for Business Value

The "upwardly mobile" automotive enterprise

Setting the strategic agenda

The new wave of mobile capabilities can drastically reshape business models; drive increasing levels of employee productivity; and reinvent how customers learn about, interact with, and purchase goods and services. Much as the Internet has created, and continues to offer, a seemingly unlimited set of possibilities for companies, mobile technologies add yet another set of emerging opportunities into the mix. It enables large segments of the global population to more rapidly access information and engage with others on a scale never seen before.

There is little doubt that consumer adoption of mobile products and services is continuing to grow exponentially. Consumer adoption has become widespread and, from a corporate standpoint, mobile is vastly broadening its reach as well. The ability to perform and access enterprise applications from non-traditional office settings holds the possibility to reinvent at a fundamental level how companies execute a range of activities – from sales and customer service to logistics and maintenance.

At the same time, mobile incorporates opportunities beyond the use of phones and tablets. Sensors built into wearable devices such as wristwatches and glasses, and embedded in everything from cars to medical devices to thermostats will provide new sources of "big data" that can be harnessed to deliver more targeted products and services, as well as to create new sources of revenue.

Overview

Much as e-commerce represented a fundamental business shift in the early part of this century, mobile technology offers a unique opportunity for automotive enterprises today. Far more than simply an emerging consumer channel, mobile capabilities are disrupting traditional business models, providing businesses with new sources of data and insight, and driving top- and bottom-line results. Our survey of over 600 companies (50 in the automotive industry) and interviews with 30 mobile leaders suggests that less than half of organizations have comprehensive strategies in place to encompass the spectrum of mobile efforts and address the broad challenges of implementation. Further, only a handful of mobile strategy leaders have put into place the needed building blocks to take full advantage of these new mobile opportunities. Significant opportunities exist for automotive companies to improve their mobile strategy development efforts, leverage mobile to reinvent business and operating models, and deliver more effective mobile IT processes and solutions.

Given the significant opportunities posed by mobile technologies, what are automotive companies doing to develop and implement mobile strategies and prioritize mobile investments? How are they using mobile capabilities to provide faster, more effective support to customers and redefine their enabling processes and business models? What are they doing to develop an infrastructure that can address traditional challenges regarding integration and security, and also take advantage of new developments in the mobile marketplace?

These are some of the questions driving the survey we conducted in conjunction with Oxford Economics. Participants included over 600 individuals with knowledge of their enterprises' mobile strategy. In addition, we interviewed representatives from more than 30 companies that have taken important forays into the mobile world.

We identified a subset of companies from the survey data – we call them "mobile strategy leaders" – that have already established a clear direction for their mobile efforts and see their mobile strategies as distinguishing them from their peers. These companies outperform their peers across a number of business metrics and provide additional guidance as to where more advanced companies are headed.

Mobile strategy leaders have also seen clear benefits in their mobile investments to date: 73 percent of leaders have seen measurable ROI from their mobile initiatives versus 34 percent of all other companies in our study and 39 percent of surveyed automotive executives. Further, 81 percent of leaders stated that mobile capabilities are fundamentally changing the way their organizations do business – and 46 percent of automotive leaders in this study agree.

Establishing a mobile agenda

Mobile holds the promise of delivering a new set of capabilities that will not only dramatically increase the speed of commerce, but will also force companies to rethink the foundations of their competitive differentiation. It will require companies to take a closer look at what products and services they offer, how they engage with customers and how they deliver on their value propositions. In short, mobile is more than simply having computing power at the touch of a finger; it is spurring a fundamental shift in user experiences and expectations.

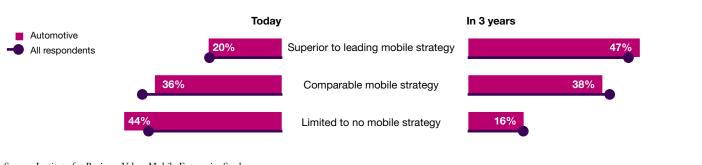Three important components of a strategic mobile agenda are:

- Developing a mobile strategy
- Improving the customer experience and driving employee productivity
- Enabling the mobile environment.

Developing a mobile strategy

Only 20 percent of the 50 automotive respondents report having a comprehensive mobile strategy today, but 47 percent said they will need one within the next three years (see Figure 1). This includes having a well-defined enterprise-wide strategy that is aligned to business, a clear funding mechanism for mobile initiatives and established governance structure for mobile initiatives. At the same time, however, companies recognize the need for a mobile strategy to effectively compete in the future.

Our study found that automotive CIOs play a prominent role in mobile activities overall. Compared with the roles of CEO, CMO, CFO, CTO, COO and LoB executives, CIOs in the industry said they have the highest influence in four of the five major mobile activity phases: generating new ideas, setting and managing priorities, acting as lead sponsor and providing governance. The automotive CIO ranked third among CxO roles only for the mobile activity phase of determining funding, behind the CFO and CEO.
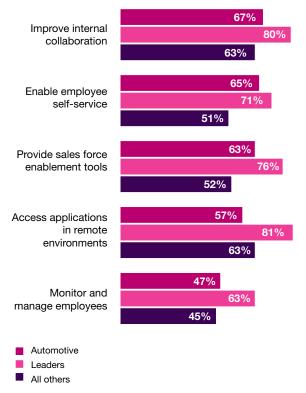
And automotive companies are using mobile capabilities to pursue multiple innovation paths, with most (52 percent of automotive respondents) focused on enterprise model innovation versus 43 percent of the full study sample, not including Leaders. Mobile is also enabling automotive respondents to innovate industry models (38 percent of respondents) and revenue models (32 percent).

Source: Institute for Business Value, Mobile Enterprise Study.

Figure 1: **Automotive respondents recognize the need for a leading mobile strategy to compete more effectively**

Importance of mobile capabilities needed to enhance employee productivity

Improve internal collaboration
- 67%
- 80%
- 63%

Enable employee self-service
- 65%
- 71%
- 51%

Provide sales force enablement tools
- 63%
- 76%
- 52%

Access applications in remote environments
- 57%
- 81%
- 63%

Monitor and manage employees
- 47%
- 63%
- 45%

■ Automotive
■ Leaders
■ All others

Source: Institute for Business Value, Mobile Enterprise Study.

Figure 2: **Automotive respondents place greatest importance on using mobile to improve aspects of employee productivity in the field.**

Improving the customer experience and driving employee productivity

Higher customer retention was the number-one benefit that automotive CxOs (cited by 56 percent) associated with using mobile to enhance the customer experience, followed by higher customer service and satisfaction (42 percent).

Along with customer benefits, improvements to employee productivity are anticipated as more employees gain the ability to work outside the office. Using mobile technologies, 70 percent of automotive companies expect employee productivity to rise 10 percent or more within the next three years – of these, 34 percent expect the productivity improvement to be 20 percent or more. Automotive respondents expect the top two employee productivity benefits to be faster response time to customers (62 percent) and improved internal communications (48 percent).

As the number of mobile workers increases, it is becoming even more important to enable the mobile workforce to be more productive. The automotive industry lags other industries in terms of the number of mobile workers today, but 48 percent of respondents expect over 10 percent of the workforce to be mobile in the next three years. Automotive CxOs placed highest importance on mobile capabilities to improve internal collaboration (cited by 67 percent), employee self-service (65 percent) and sales force enablement tools (63 percent, see Figure 2). Notably, in all responses to this question, the automotive industry lags the full sample in estimating the importance of mobile to the business.
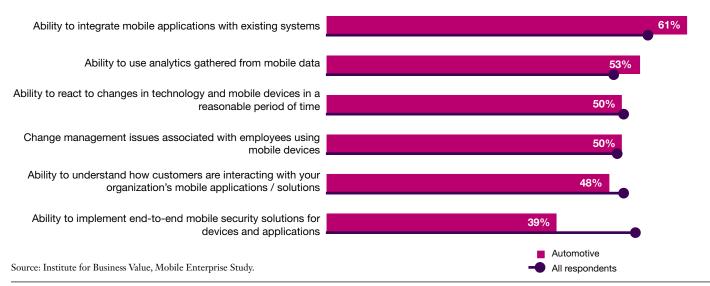
In addition, industry adoption of a bring-your-own-device (BYOD) strategy is relatively small (36 percent). But for those who have BYOD programs, 60 percent reported having well-documented policies and procedures for employees, 50 percent said that IT provides the required participant support and 42 percent agreed that their organizations provide the necessary training to employees using mobile devices for work.

Enabling the mobile environment

From the design of new customer applications to the integration with existing legacy systems and the development of new uses for data and analytics, mobile solutions are forcing information technology executives to make new and perhaps difficult choices regarding their current and future skills, capabilities and infrastructures. Automotive companies, like others, struggle with the design and development of mobile applications. Quality and functionality for app users ranked a top concern for automotive CxOs (cited by 58 percent) as well as the full study sample (57 percent).

Roughly half of all surveyed companies struggle with mobile integration, security and analytics capabilities. The mobile challenge named by automotive CxOs was integrating mobile applications with existing systems (cited by 61 percent) versus 54 percent of the full study sample.

Even though they named it as their top mobile challenge, automotive respondents report significantly more success in managing integration than the full study sample (see Figure 3). As was true throughout the study findings, however, Leaders were much farther ahead of all other respondents in integrating mobile applications.

Top mobile challenges facing organizations

Ability to integrate mobile applications with existing systems — **61%**

Ability to use analytics gathered from mobile data — **53%**

Ability to react to changes in technology and mobile devices in a reasonable period of time — **50%**

Change management issues associated with employees using mobile devices — **50%**

Ability to understand how customers are interacting with your organization's mobile applications / solutions — **48%**

Ability to implement end-to-end mobile security solutions for devices and applications — **39%**

■ Automotive
●— All respondents

Source: Institute for Business Value, Mobile Enterprise Study.

Figure 3: **Automotive respondents report more success in managing integration than the full study sample.**

When it comes to applying analytics to mobile data, again the automotive companies significantly lag mobile Leaders. For example, 73 percent of Leaders take action based on mobile data versus 43 percent of automotive CxOs. Similarly, 71 percent of Leaders state that they are effective in both analyzing mobile data and handling large volumes of mobile data (versus 37 and 36 percent for automotive CxOs, respectively). Despite their plans to depend increasingly on data in the future, only a little more than half of automotive CxOs described their mobile capabilities (including devices and data) as being secure. And while 70 percent of Leaders use cloud infrastructure for mobile data insight development, just 39 percent of automotive companies do so.

Upward and onward through mobile capabilities

From our survey and discussions with executives closely connected to mobile efforts in their enterprises, one point is clear, mobile is not simply an initiative, a program, a discrete channel or a passing institutional fad. Rather, it is becoming a pervasive lens through which the enterprise must consider its fundamental tenets: how it interacts with its customers; how it develops and delivers products and services; and how it applies its physical, human and digital capital.

Our study highlights that companies are looking for their mobile efforts to improve customer experience, drive employee productivity and, most importantly, deliver on new and innovative value propositions in the marketplace. While there are always risks associated with the use of new technologies, we also see risks associated with not taking advantage of mobile capabilities as customer expectations grow, and new and emerging competitors achieve results in this space.

An automotive organization's mobile strategy must address the basics: where within the enterprise mobile technologies can offer the greatest benefits, how organizations can enable their IT functions to develop mobile solutions more efficiently and effectively, and what segments of the workforce need to be "mobilized" to achieve the greatest return on investment.

But perhaps most important is to understand how mobile can be prioritized and integrated with other digital investments within the enterprise, and how mobile capabilities can be used to develop new and innovative business models that help differentiate the organization in the marketplace. Much as the Internet required a rethinking of the nature of commerce 15 years ago (and continues to do so today), automotive enterprises must consider how this new mobile inflection point will change their future direction.

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- **Development & Integration Services:** Develop, deploy and manage mobile infrastructures
- **Platform Solutions:** Develop high quality, secure mobile app and web experiences
- **Management Solutions:** Manage mobile devices, expenses, data, applications and services
- **Security Solutions:** Secure mobile devices, apps, networks and transactions
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