

Mobility in ERP 2011

May 2011

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~ Underwritten, in Part, by ~



Executive Summary

Organizations want to use as much of their Enterprise Resource Planning (ERP) investment as possible. But ease of access to ERP information, both at the direct labor level and the indirect labor level, has inhibited many organizations from getting the maximum benefit from their investment. With the explosion in capabilities of consumer-grade mobile devices and apps, top performing companies are looking to mobility to extend and expand the use of ERP. This research finds that Best-in-Class companies implement their ERP systems and their business processes to take full advantage of the capabilities that mobility offers.

Best-in-Class Performance

Aberdeen used the following five key performance criteria to distinguish Best-in-Class companies:

- 25% of the work week spent trying to access information, compared to almost 40% for all others (the Industry Average and Laggards combined)
- 97% complete and on-time delivery, compared to 89% for all other companies
- 30% improvement in time-to-decision over the past year, compared to 7% for all other companies
- 98% inventory accuracy, compared to 90% for all other companies
- 2.2 days average cycle time between service completion and invoicing, compared to almost 10 days for all other companies

Competitive Maturity Assessment

Survey results show that the firms enjoying Best-in-Class performance shared several common characteristics, including:

- more than three times as likely as all others to make mobility strategy an inherent part of their ERP implementation
- 68% more likely than all others to notify decision makers immediately if exceptions in business processes occur, regardless of time or location
- twice as likely to be using mobile devices to automatically collect data for ERP data entry

Required Actions

In addition to the specific recommendations in Chapter Three of this report, to achieve Best-in-Class performance, companies must:

- Have a mobility strategy deeply integrated with your ERP strategy
- Automatically deliver process and KPI exception alerts and notifications to key decision makers
- Deliver role-based home pages for mobile users to provide simple and concise information from the ERP system

Research Benchmark

Aberdeen's Research Benchmarks provide an in-depth and comprehensive look into process, procedure, methodologies, and technologies with best practice identification and actionable recommendations

How Does Your Performance Compare to the Best-in-Class?



- Compare your processes
- Receive a free, personal PDF scorecard
- Benefit from custom recommendations to improve your performance, based on the research

Take the Assessment

Receive Your Free Scorecard

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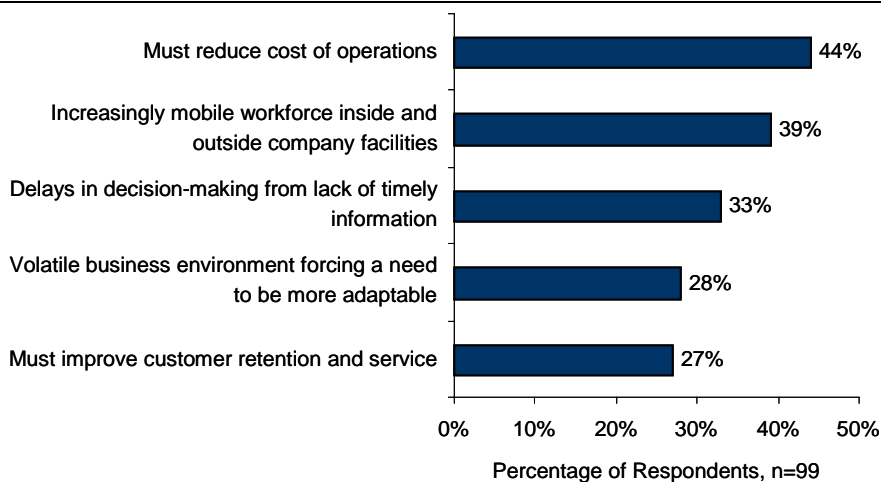
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Chapter One: Benchmarking the Best-in-Class

Business Context

As Aberdeen showed in *ERP in Manufacturing: Measuring Business Benefit and Time to Value*, ERP is a key component in helping drive cost reduction through continuous improvement. Figure 1 shows that the top pressure indicated by this report's respondents is the need to reduce the cost of operations.

Figure 1: Top Business Drivers Impacting ERP Strategy



Source: Aberdeen Group, April 2011

But as we look more closely at the pressures that drive mobility in ERP, we see that access to ERP for mobile workers is second only to reducing costs. Mobility is not just defined simply as the delivery of ERP access to mobile knowledge workers outside the four walls. It is also defined as any worker that must have access to the ERP system, but must be able to move around within a facility. This is tied directly to the third most important pressure, timely decision-making. Getting the right information to the right people, for the right decisions is a driving force behind mobilizing the workforce. Much of this is also related to volatility - the need to be able to react as quickly as possible to customer and market issues without being tethered to a desktop.

The Maturity Class Framework

Aberdeen used five key performance criteria to distinguish the Best-in-Class from Industry Average and Laggard ERP implementations (Table I). These Key Performance Indicators (KPIs) were influenced by both the desire to select metrics that are common across industries and to measure success in multiple dimensions. To that end, the selected KPIs reflect both effectiveness and efficiency in both back-office and customer facing metrics, as well as metrics which can be greatly affected by an effective mobile ERP strategy.

Fast Facts

Best-in-Class companies have the following performance advantages over Laggard companies:

- ✓ **90%** less time spent looking for information
- ✓ **7** times faster time to decision
- ✓ **19%** better inventory accuracy

At the same time, they turn around services to invoices almost five times faster

"Mobile devices connected to our ERP have provided us with better receiving, picking, and put away accuracy in our warehouses. It has also improved our productivity and inventory accuracy across the board."

~ John Ring, Business Process Analyst, PCC SPS Fastener Division

Table 1: Top Performers Earn Best-in-Class Status

Definition of Maturity Class	Mean Class Performance
Best-in-Class: Top 20% of aggregate performance scorers	<ul style="list-style-type: none"> ▪ 25% of work week spent trying to access information ▪ 97% complete and on-time delivery ▪ 30% decrease in time to decision over the past year ▪ 98% inventory accuracy ▪ 2.2 days average cycle time between service completion and invoicing
Industry Average: Middle 50% of aggregate performance scorers	<ul style="list-style-type: none"> ▪ 37% of work week spent trying to access information ▪ 92% complete and on-time delivery ▪ 7% decrease in time to decision over the past year ▪ 92% inventory accuracy ▪ 4.3 days average cycle time between service completion and invoicing
Laggard: Bottom 30% of aggregate performance scorers	<ul style="list-style-type: none"> ▪ 43% of work week spent trying to access information ▪ 79% complete and on-time delivery ▪ 5% decrease in time to decision over the past year ▪ 79% inventory accuracy ▪ 9.09 days average cycle time between service completion and invoicing

Source: Aberdeen Group, April 2011

The Best-in-Class PACE Model

To achieve the full benefits of an ERP solution in the pursuit of corporate goals, a combination of strategic actions, organizational, knowledge and performance management capabilities, and enabling technologies are required. These can be summarized as shown in Table 2.

Table 2: The Best-in-Class PACE Framework

Pressures	Actions	Capabilities	Enablers
<ul style="list-style-type: none"> ▪ Must reduce cost of operations 	<ul style="list-style-type: none"> ▪ Provide visibility to business processes and information across functions and departments ▪ Provide front-line workers with mobile information to make decisions 	<ul style="list-style-type: none"> ▪ Data entry at the point of activity ▪ Mobility strategy is an inherent part of ERP strategy and implementation ▪ Decision-makers are notified in real time of exceptions in order to react immediately, regardless of location ▪ Process to determine and prioritize which ERP capabilities are mobilized ▪ ERP users have immediate access to any needed job-related information 	<ul style="list-style-type: none"> ▪ Mobile devices have the ability to operate as bar code or RFID readers ▪ Automated alerting system that can distribute alerts through email, text, SMS, etc. to mobile devices ▪ Mobile apps for warehouse users that include pick, put away, etc. ▪ Mobile app for field service to manage orders, schedule, and inventory ▪ Mobile home pages and dashboards for all key roles including, finance, manufacturing, scheduling, sales, executive, etc ▪ Event Management (Triggers & Alerts) ▪ Mobile access and integration to process workflow and event management

Source: Aberdeen Group, April 2011

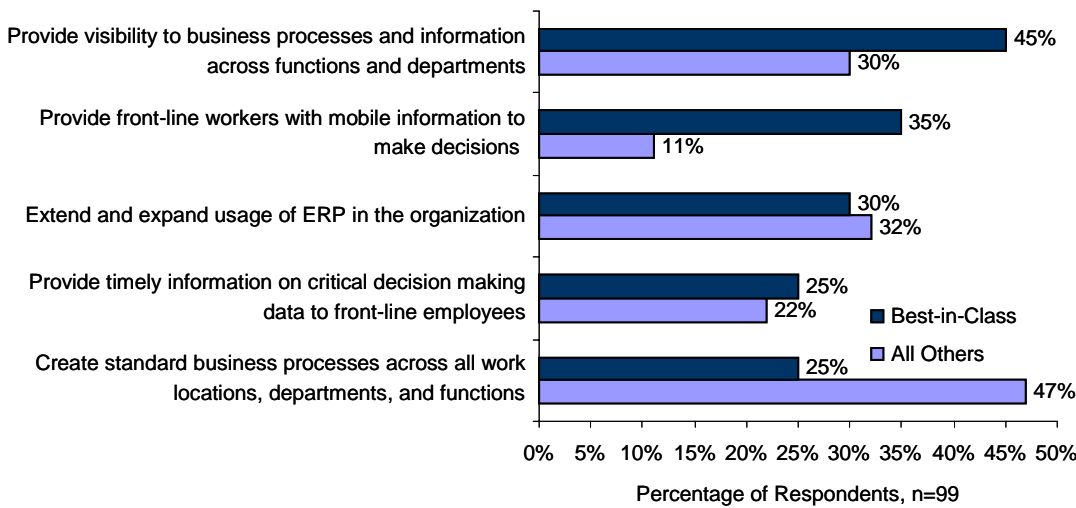
Best-in-Class Strategies

Looking at Figure 2, we see some fairly significant divergence regarding mobility and ERP between Best-in-Class companies and all others (the Industry Average and Laggards combined). While most other companies are focused on standardizing their business processes, Best-in-Class companies are more focused on providing visibility into their business processes. The reason for this is that most Best-in-Class companies have already established some form of standardized business processes, as we will see in Chapter Two.

Fast Facts

- √ Best-in-Class companies are **twice as likely** as all others to focus on visibility to business processes through mobile devices
- √ Laggard companies are **twice as likely as all others** to still be focused on standardizing those business processes

Figure 2: Strategic Actions of the Best-in-Class



Source: Aberdeen Group, April 2011

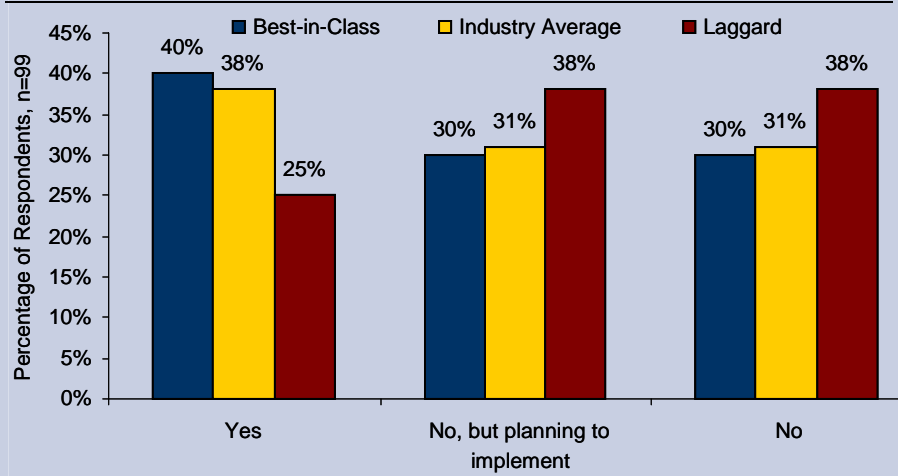
One key strategy that companies across maturity classes have in common is to provide information for decision-making to employees. But another area of large divergence is providing that information in a mobile form. Best-in-Class companies are over three-times more likely to focus on getting critical information to frontline workers on mobile devices.

From Table I, we see that Best-in-Class companies spend only a quarter of their week looking for information. Contrast that with Laggard companies using up almost half their week in trying to acquire the right information. This shows that Best-in-Class companies are better prepared to make ERP information available, while also having it configured properly for quick access. Using mobile devices can be a large part of a strategy to get that information to the right people at the right time.

Aberdeen Insights — Strategy

Best-in-Class companies are further down the road for mobilizing their work forces. As Figure 3 shows, 40% of Best-in-Class companies already provide mobile access to ERP information, while only 25% of Laggard companies give mobile access to ERP.

Figure 3: Mobile Access to ERP



Source: Aberdeen Group, April 2011

Interestingly, if the companies that planned on providing mobile access to ERP actually followed through, Laggards and Industry Average companies would not be very far behind in giving access. From this we can see that providing access is not enough. This report will later show that aligning mobility strategy and ERP strategy, standardized processes, alerting, mobile workflow, and other related capabilities are necessary to take full advantage of mobile ERP. But at 40%, even Best-in-Class companies have significant room for improvement in just providing basic mobile access.

"Mobilizing our quality staff and sales forces have allowed us to quickly react to customer issues in the field by rapidly connecting as-built data to customer issues. We have gone from weeks to respond to corrective action issues to hours. We couldn't have done it without getting the information to and from the ERP system to the mobile devices."

~Director of Customer Service, Heavy Truck Powertrain Manufacturer

In the next chapter, we will see what the top performers are doing to achieve these gains.

Chapter Two: Benchmarking Requirements for Success

The integration of ERP along with the complementary applications which extend its core functionality that process industries require, enable these businesses to execute their strategies and attain their goals of effectively serving customers, reducing costs, and growing their businesses.

Case Study — Furniture Manufacturer

Take, for example, a manufacturer of furniture, storage, and architecture. The company's Vice President of IT is tasked with making sure that the company is able to implement the technology and processes that will allow it to continue to run the business effectively. Before the company implemented an ERP solution they were having trouble keeping track of the millions of different combinations of certain storage units that they make, among other products. Since the company's products are built to order, it was important for the company to be able to produce products to specifications as quickly as possible in order to please customers. The company needed a parametric system that would help them to do analysis. It is important to the company to be able to project demand as well as costs for large projects. The company needed a fair amount of customization for its manufacturing operations. Finally, it needed integration with desktop based solutions. As a result, over the past 10 years, the Vice-President has implemented five plants worth of ERP at the company.

With ERP, the company has been able to re-examine its process flows and enable itself to run more effectively. All workers are able to access job instructions in order to avoid mistakes. According to the Vice-President, "80% to 90% of our engineering knowledge is now in our models. This has helped us to cut what was a 23 day production cycle down to 10 days." These improvements have had a significant impact on the company's customer satisfaction. Outside of the shop, the company's receivables have been cut down to 10 days from around a month. The company is able to see these benefits because it is making sure that its employees are getting the full use out of ERP. The Vice-President says, "We scan product 6-times throughout the manufacturing process, ERP is pretty well used by 90% of the company." Clearly, ERP has had a significant impact on the company, but the company plans to increase that impact in the future.

Right now, senior management has access to ERP from their phones. They are using it to see events in the business as they occur. This has allowed them to make decisions no matter where they are or what time of day it is. This increased visibility has increased reaction times and minimizes adverse effects to the business.

continued

Fast Facts

Best-in-Class companies outperform all others in information and decision-making capabilities:

- √ **4 times** as likely as all others to report a reduction in time-to-decision
- √ Over **60%** less time looking for specific information

Case Study — Furniture Manufacturer

This increased usage has caused the company to seriously consider moving forward with a broader mobile strategy for ERP. This includes consumer grade tablets for employees. The Vice-President listed the reasons that these devices were enticing as: “Size, and replacement of paper, can be used as a supervisory device, rugged cases that can be used to protect them, and improved battery life.” The company is receiving emails now with data, but this will take access to a whole new level. The Vice-President says, “We see this as an enabler to our employees, not a detriment.” By adding a broader mobility strategy to its ERP strategy, the company will be able to continue to grow.

Competitive Assessment

Aberdeen Group analyzed the aggregated metrics of surveyed companies to determine whether their performance ranked as Best-in-Class, Industry Average, or Laggard. In addition to having common performance levels, each class also shared characteristics in five key categories: (1) **process** (standardization of business processes and the ability to respond to a recall); (2) **organization** (continued commitment to training and implementation); (3) **knowledge management** (providing visibility and supporting exception management); (4) **technology** (automation through features of ERP and complementary solutions); and (5) **performance management** (the ability of the organization to measure results to improve business performance). These characteristics (identified in Table 3) serve as a guideline for best practices, and correlate directly with Best-in-Class performance across the key metrics.

Table 3: The Competitive Framework

	Best-in-Class	Average	Laggards
Process	Process to determine and prioritize which ERP capabilities are mobilized		
	35%	19%	8%
	Standardized work instructions are defined and maintained		
	75%	70%	48%
Organization	Data entry at the point of activity		
	70%	56%	56%
	Mobile devices, apps, and mobile infrastructure strategy tied to ERP strategy		
	50%	19%	18%
Performance Management	Standards and guidelines for mobile devices and access		
	55%	33%	29%

"Refinery is a continuous process. If you have an upset condition, the faster you react, the less lost profit opportunity you are going to leave on the table. This can be very significant."

~ Director of IT, Large Oil Refinery

	Best-in-Class	Average	Laggards
Knowledge	Decision-makers are notified in real-time of exceptions in order to react immediately, regardless of location		
	47%	30%	25%
Knowledge	ERP users have immediate access to any needed job-related information		
	68%	38%	32%
Technology	Ability to secure mobile device and ERP mobile applications		
	74%	48%	39%
	Mobile devices have the ability to operate as bar code or RFID readers		
	68%	38%	22%
Technology	Mobile access and integration with process workflow and event management		
	50%	15%	15%
Performance	ERP usage is benchmarked before and after mobility rollout		
	37%	13%	11%
	Ability to measure productivity of indirect labor such as managers, technicians, and sales		
	42%	19%	21%

Source: Aberdeen Group, April 2011

Capabilities and Enablers

Based on the findings of the Competitive Framework and interviews with end users, Aberdeen’s analysis demonstrates that significant benefits can be gained from an integrated ERP solution. The Best-in-Class have reported the following quantifiable business benefits gained through the implementation of the following capabilities:

- The Best-in-Class are 120% more likely than all others to report a reduction in operational costs
- The Best-in-Class are almost 200% more likely than all others to report a reduction in inventory costs
- The Best-in-Class are 173% more likely than all others to report an increase in profits
- The Best-in-Class are over three times as likely as all others to report an increase in revenue
- The Best-in-Class are over three times as likely as all others to report growth without an increase in headcount

Fast Facts

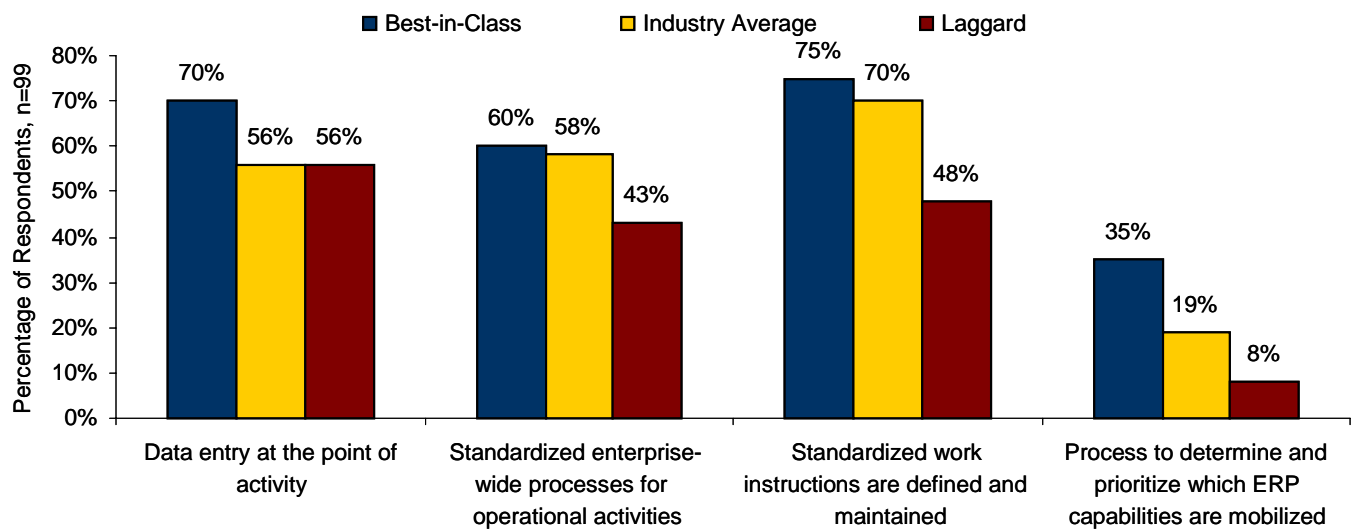
Mobility in ERP Best-in-Class companies have the following capabilities over Laggard companies:

- ✓ **5 times** more likely than all others to prioritize what should be mobilized
- ✓ **2 time** more likely than all others for users to have mobile access
- ✓ **3 times** more likely than all others to have established benchmarks for mobile rollouts

Process

One of the hindrances of a traditional ERP implementation is that it forces direct labor users to be tethered to fixed workstations and laptops. It is important for businesses to know just where this hindrance is having the greatest impact on the organization. The Best-in-Class are 133% more likely than all others to have a process to determine and prioritize which ERP capabilities are mobilized (Figure 4). Most organizations are implementing data entry at the point of activity, but the Best-in-Class are differentiating themselves in that almost three-quarters of the Best-in-Class have implemented this capability in comparison to just over half of all others.

Figure 4: Process Improvements



Source: Aberdeen Group, April 2011

Additionally, ERP is instrumental in helping to enable standards across the organization. Standards ensure that best practices are followed and that the business is being operated to its full potential. The Best-in-Class are more likely to implement standardized enterprise-wide processes for operational activities. These organizations are providing access to standardized work instructions that are defined and maintained for all workers. Mobile access allows employees to reference work instructions and follow standard business processes from wherever they are performing their tasks.

Organization

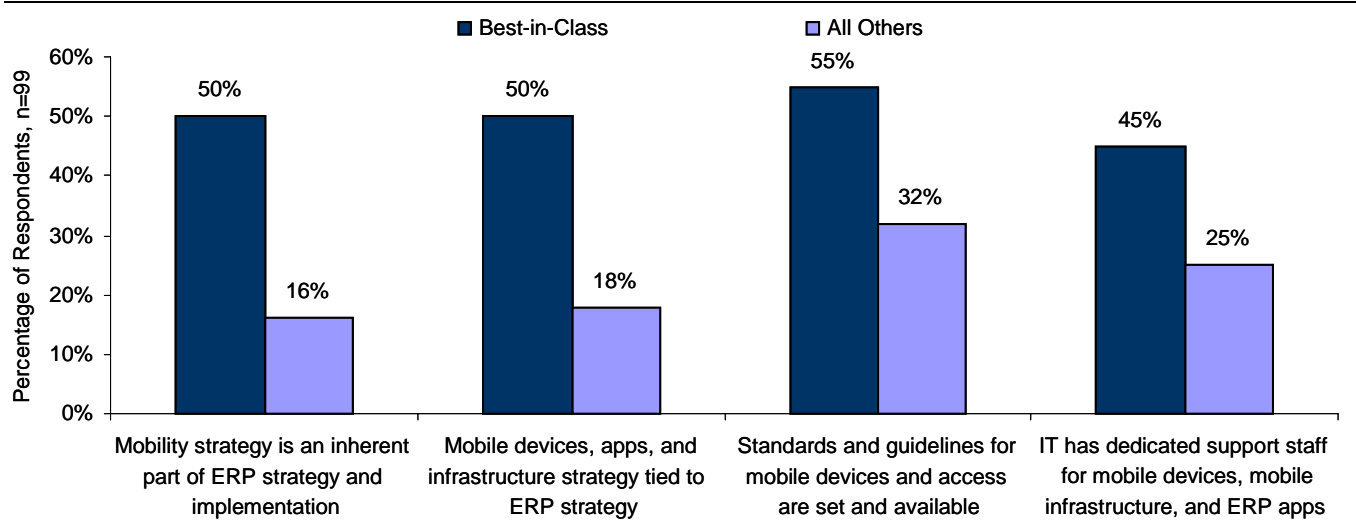
Aberdeen's [ERP in Manufacturing 2010: Measuring Business Benefit and Time to Value](#) report, found that ERP implementations are most successful when ERP has the continued commitment of senior management throughout selection, implementation, and beyond. As an extension to this point, Aberdeen advises that when management is devising its ERP strategy, the mobility strategy be considered in conjunction. The Best-in-Class are over 3-times more likely than all others to make their mobility strategy an inherent part of ERP strategy and implementation (Figure 5). This alignment of strategy

"As we utilize a network of contract manufacturers, the additional advantage of mobility allows for better coverage of the 24 hours in a day that sites are working."

~ Staff, Large Mobile
Technology Company

and design gives organizations increased benefits from their ERP implementation and lays the groundwork for an easier mobile deployment. The Best-in-Class are almost 3-times as likely as all others to tie mobile devices, apps, and infrastructure to ERP strategy. This strategy includes the availability of standards and guidelines for both mobile devices and access. These standards lay out the best practices and ensure that the right employees are being given access and the tools that are selected are compatible and secure.

Figure 5: Organizational Initiatives



Source: Aberdeen Group, April 2011

Of course, a mobile strategy is ineffective if employees do not have the support that they need in order to use these tools. In any organization, there are going to be issues with technology that can become road blocks on the way to efficient work. Many employees may not have the technical knowledge on how to truly make ERP work for them on a mobile device. With a wide range of consumer-grade devices that are able to access ERP, there are many different standards and checks that need to be carried out. This is why the Best-in-Class are 80% more likely than all others to provide IT with a dedicated support staff for mobile devices, mobile infrastructure and ERP apps.

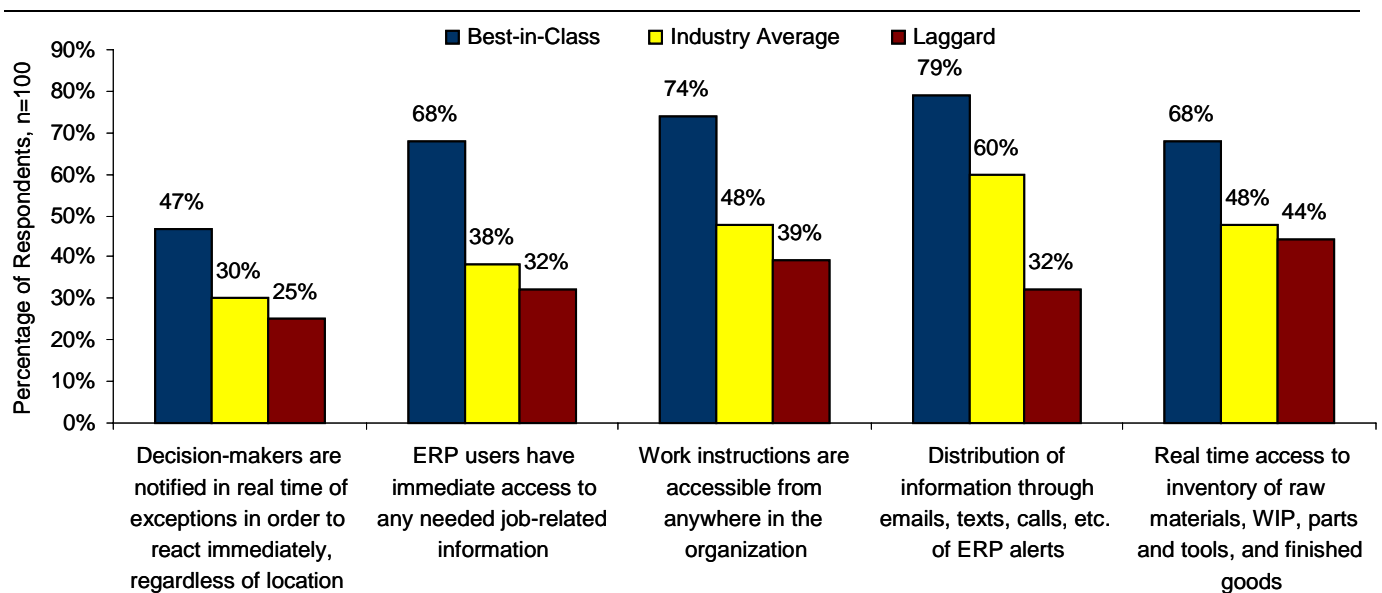
Knowledge Management

ERP provides decision makers with visibility into their business that can assist in strategy execution. It is important for this information to be as accurate and timely as possible. A decision may be wildly inappropriate if based on obsolete information. When critical business events occur, decision makers need access to timely and accurate information so that they can react accordingly. Mobile access ensures that this information is getting to the right people at the right time. With Best-in-Class companies 68% more likely than all others to be notified in real time of exceptions, those

companies are more likely to react immediately, regardless of location (Figure 6). In Laggard companies, less than a third even distribute ERP information through emails, texts, and calls of ERP alerts. Once again this puts Laggard companies at a significant disadvantage in reacting to business and market events.

In order to make sure that orders are fulfilled and schedules are adhered to, it is important to aid employees with real time access to inventory of raw materials, work in progress, parts and tools, and finished goods. The Best-in-Class are 45% more likely than all others to deliver this capability to their users.

Figure 6: Knowledge Management Capabilities



Source: Aberdeen Group, April 2011

As mentioned above, it is important to arm employees with the knowledge that they need to efficiently complete their job. Some workers have tasks that are wide-ranging, yet require access to work instructions. Best-in-Class companies are 89% more likely to give ERP users immediate access to any needed job-related information. Seventy-four percent (74%) of them can access work instructions from anywhere in the organization.

Technology

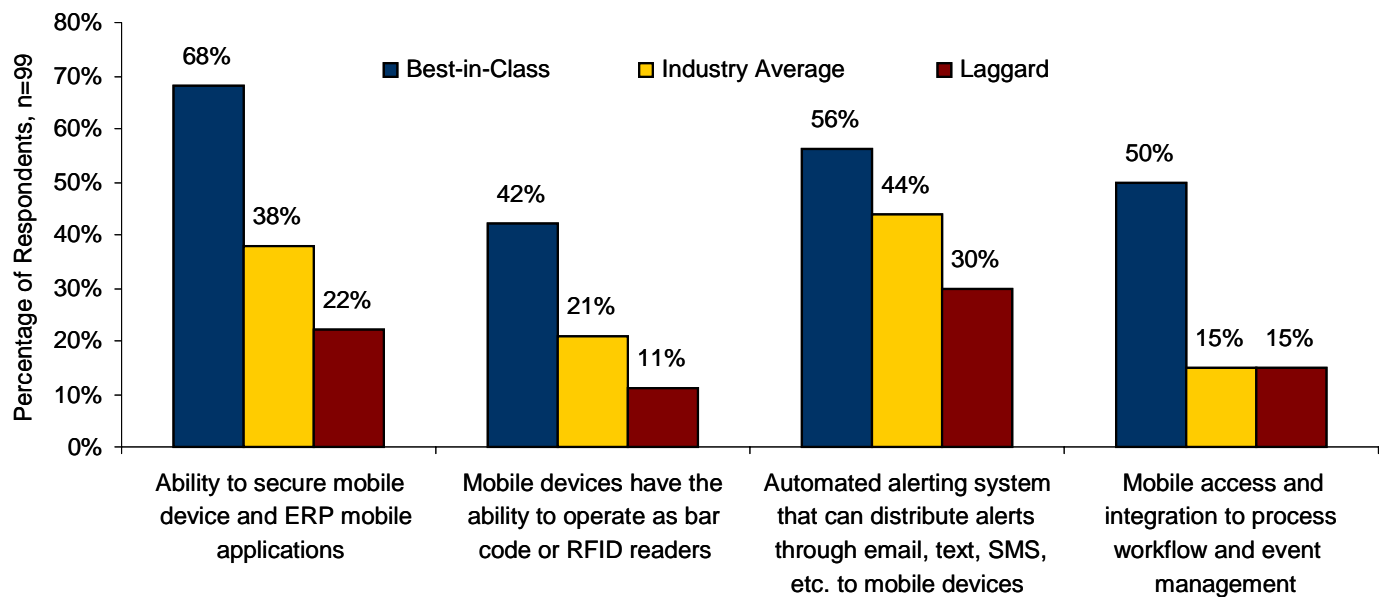
Mobile access to ERP gives workers the information that is essential to running the business wherever and whenever it is needed. In the current business world, employees are increasingly mobile and this increased access gives them the freedom to carry out tasks right away no matter where they are. Of course, with valuable information being contained in ERP, it is important to ensure that information is secure. Exposing corporate ERP information on a device that could be lost or stolen outside the four walls of the enterprise means that companies need the ability to secure the

"[Mobilizing ERP] has opened up possibilities to make ERP data more accessible in real time during routine business activities, increasing efficiency and planning effectiveness."

~ Manager, Mid-Size, Laser Equipment Manufacturer

information, as well as secure and monitor the device. The Best-in-Class are almost 2-times more likely than all others to have the ability to secure mobile devices and ERP mobile applications (Figure 7).

Figure 7: Mobile Technology



Source: Aberdeen Group, April 2011

Automation and technology play significant factors in ensuring that business processes are properly followed. Having mobile-capable workflow allows workers and decision-makers to be part of the process workflow. Best-in-Class companies are three times as likely as all others to have mobile access and integration to process workflow and event management. Also, with an automated alert system, decision makers can be notified of exceptions to business processes and have visibility into appropriate business processes. Fifty-six percent (56%) of the Best-in-Class companies use alerting systems.

Of course, in order for ERP to have accurate data, data must be input accurately. By assisting this process with technology, data is ensured to be accurate. The Best-in-Class are aiding their employees with the ability for mobile devices to operate as bar code or RFID readers. They are over twice as likely as all others to implement this technology.

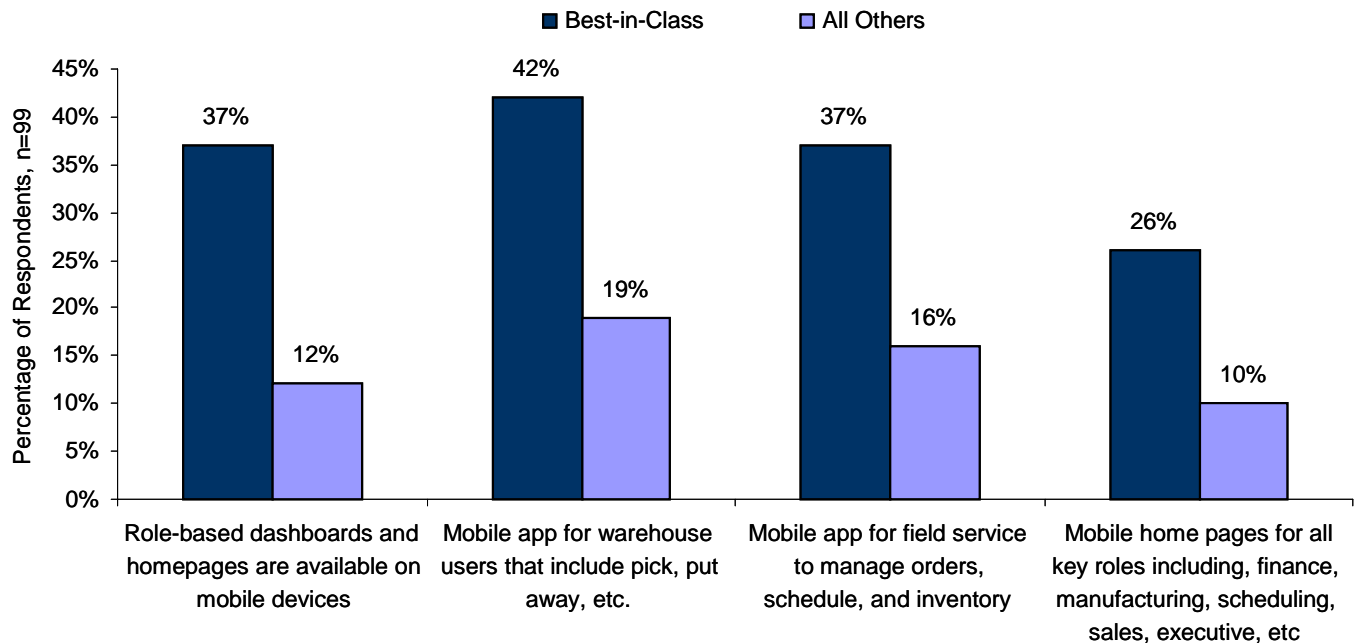
ERP systems have traditionally been notorious for providing too much information at once to workers. Only recently have role-based homepages become common. These pages provide all the needed information someone in a specific role needs to do their job. The Best-in-Class are over 3-times more likely than all others to have role-based dashboards and homepages redesigned specifically for mobile devices (Figure 8).

Fast Facts

One of the key aspects of mobility is integration into disciplined business processes. Best-in-Class companies are well ahead of other companies in that they are:

- ✓ **56%** more likely than all others to have alerts to exceptions
- ✓ **3 times** more likely than all others to business process workflow tied to their mobile device

Figure 8: Role-based Mobile Applications



Source: Aberdeen Group, April 2011

Figure 8 and Table 4 show how well companies have deployed mobile applications to support two key tasks, warehouse operations and field service. Mobility is especially important for warehouse users and field service workers because of the interaction they need with the ERP system, while having to constantly be on the move within the facility or in the field. The Best-in-Class are two to three times as likely as all others to roll mobile ERP out to these workers.

Table 4 shows that companies, even the Best-in-Class, do not implement mobile ERP access all at once. The table shows exactly where companies prioritize their mobility rollouts. All other companies lag well behind in mobilizing almost all modules and business processes. Also note that Best-in-Class companies are twice as likely as other companies to have workflow and event management mobilized. This allows more of the workforce to have visibility into business processes.

Table 4: Top 12 ERP Modules with Mobile Access

Mobilized ERP Module	Best in Class (% Access to Mobile)	All Others (% Access to Mobile)
Sales & Marketing	62%	19%
Inventory Control	43%	23%
Order Management	40%	21%
Project Management	33%	15%
Event Management	33%	17%
Workflow	33%	13%
Accounts Receivable	31%	13%
Fixed Asset Management	31%	12%

Mobilized ERP Module	Best in Class (% Access to Mobile)	All Others (% Access to Mobile)
Job or Project Costing	31%	13%
Shop Floor Control	31%	10%
Purchasing	31%	15%
Enterprise Asset Management	30%	6%

Source: Aberdeen Group, April 2011

Performance Management

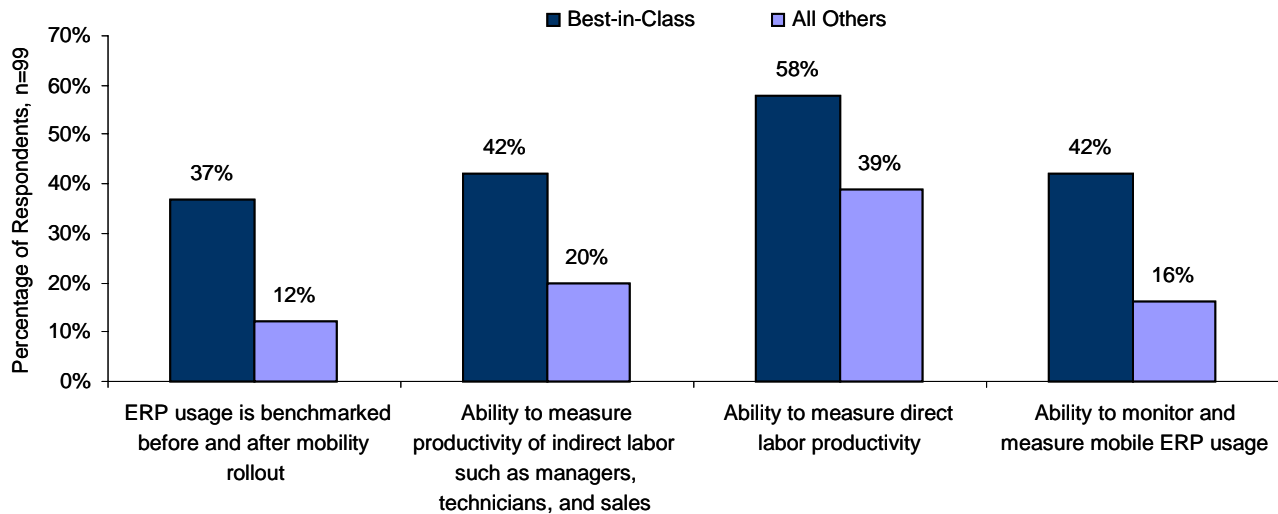
Finally, it is extremely important for businesses to measure the performance of their ERP implementation. Aberdeen's [ERP in Manufacturing 2010: Measuring Business Benefit and Time to Value](#) report, found that the Best-in-Class were four times as likely as Laggards to measure the business benefits from the implementation of ERP. These measurements lead to increased benefits from ERP implementations. Since the Best-in-Class are over three times as likely to measure ERP usage before and after mobility rollouts they are able to tell if the organization is getting the most value out of their ERP implementation (Figure 9). The Best-in-Class are 163% more likely than all others to monitor and measure mobile ERP usage.

Fast Facts

Mobility enables companies to measure worker productivity like never before. Best-in-Class companies are:

- ✓ **49%** more likely than all others to measure direct labor productivity
- ✓ **110%** more likely than all others to measure indirect labor productivity

Figure 9: Performance Management Capabilities



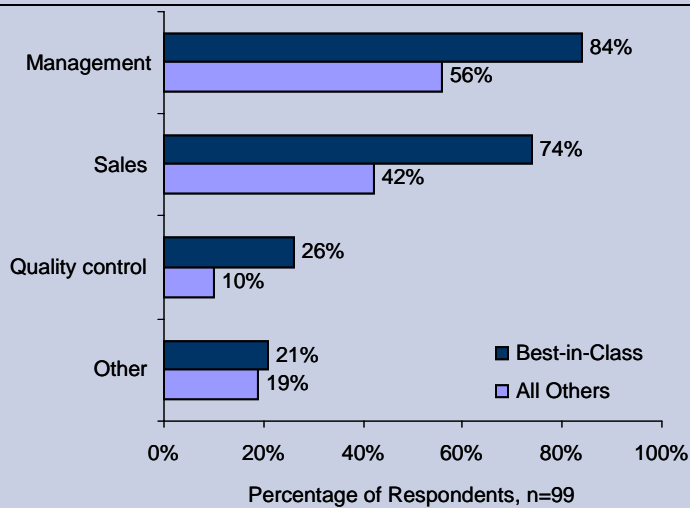
Source: Aberdeen Group, April 2011

In addition to measuring the impact on ERP usage that mobility brings, the Best-in-Class are also arming themselves with the ability to measure the productivity of their employees. Because of the disruption in process labor collection can generate, this is a measure that would be almost impossible to get without significant task disruption if mobility was not available. The Best-in-Class are 49% more likely than all others to measure direct labor productivity and 110% more likely to measure labor that is indirect.

Aberdeen Insights — Technology

As mentioned above, the Best-in-Class companies have processes to determine and prioritize which ERP capabilities are mobilized. Different roles have different needs that ERP helps to address. All companies have a distinct bias for mobilizing knowledge workers (e.g. management and sales) over operations workers (e.g. quality control) as seen in Figure 10. But Best-in-Class companies have pushed mobility out in all roles at a significantly greater pace than any others. In Best-in-Class companies, almost all management and three quarters of sales have been mobilized with ERP. While in all other companies only around half of each maturity class possesses any mobile capability. Interestingly, quality control in Best-in-Class companies is 2.5-times more likely than all others to have mobile access to ERP. This shows that even in operational roles, Best-in-Class companies far outstrip all others in mobilizing ERP.

Figure 10: Who Has Mobile Access



Source: Aberdeen Group, April 2011

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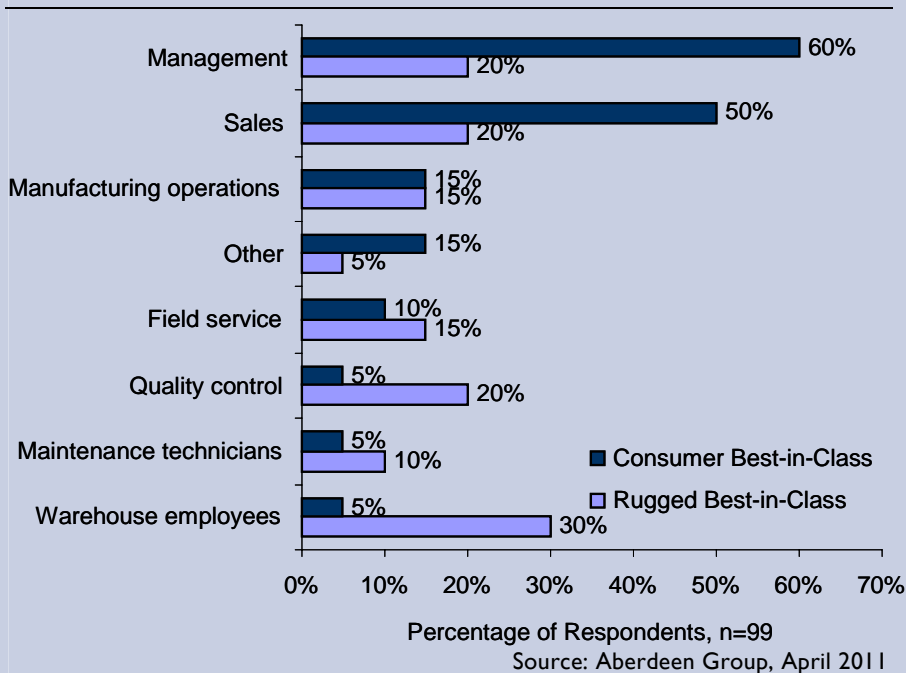
"What is becoming very important is how you work with the information in ERP. When events happen what do you do with it? ERP systems have the capability to run 24x7, mobility now allows businesses to extend this outside of the organization by providing alerts to the appropriate people, on the appropriate device at the appropriate times."

~ Michael Klemen, Enterprise Thought Leadership, Automotive Industry Western, Cisco

Aberdeen Insights — Technology

One of the key distinctions for deploying mobile ERP into specific roles is the type of device deployed. Figure 11 shows how Best-in-Class companies deploy devices. A consumer-grade device is one that you could typically pick up in any mobile phone store. A rugged device is one that has been built to withstand drops, moisture, dirt, and extreme temperature. A rugged device could also be a consumer device converted to rugged standards. As would be expected, they are two to three times more likely to deploy a consumer-grade device versus a more rugged or hardened device for management or sales. As we get to operational workers, using the warehouse as an example, we see that Best-in-Class companies are six times more likely use a rugged device.

Figure 11: Rugged or Consumer



Chapter Three: Required Actions

While there is a lot of talk about mobility, most companies are both old users of the technology and new users of it. They have traditionally used rugged devices in operational tasks like barcode scanning for warehousing and shelf stocking. But newer consumer technology is putting pressure on companies to give ERP access to more and more users, as well as have a mobility strategy that is closely aligned with the ERP strategy. Whether a company is trying to take its mobile ERP strategy from Laggard to Industry Average, or Industry Average to Best-in-Class, the following actions will help spur the necessary performance improvements.

Laggard Steps to Success

- **Have a mobility strategy that is part of your ERP strategy.** Fifty percent (50%) of Best-in-Class companies have aligned their mobility strategy with their ERP strategy compared to 16% of Laggards. This has allowed Best-in-Class companies to implement mobile devices capable of accessing ERP with less effort and cost than an ad hoc approach. Those same companies can to better service their end users by making sure users are following corporate guidelines for mobile usage anywhere they are operating.
- **Implement even a simple email alerting system.** Almost all modern ERP implementations enable the generation of an alert on exceptions or through a workflow. But Best-in-Class companies are twice as likely to have, at a minimum, automated email and exception alerting capabilities. Start with that basic ability to alert senior management to significant exceptions in operating metrics through an email. As they become dependent on those alerts, it will become easier to justify rolling out more proactive applications for their mobile devices.
- **Standardize on standardization.** One of the key strategic actions for increasing operational efficiency is establish standard business processes. Over 50% of Laggard companies are focused on developing standard processes as a strategic action, but staying the course and getting that done should be a priority. Compare this to 75% of Best-in-Class companies that already have standard processes.

Industry Average Steps to Success

- **Prioritize mobile access to ERP.** Best-in-Class companies are twice as likely to have set priorities on what roles and functions get mobile access to ERP. This allows resources to be applied to only the most critical mobile rollouts and ensures that those rollouts have greater chance of being successful. Don't let your mobile ERP

Fast Facts

- ✓ Best-in-Class are **3-times** as likely as all others to benchmark the impact of mobility
- ✓ The Best-in-Class companies are **2-times** more likely than all others to continuously measure productivity and the impact of mobility

"Using mobile devices for our senior management finally makes them feel connected to the ERP system. Before, all the ERP system was to them was a phone call to a business analyst to run a report. Now, we have senior executives constantly reviewing critical information on their own and make fast decisions."

~ Terry Lecander, Business Analyst, Waukesha Bearings

strategy be the Wild West. Maintain control of the pace of the rollout.

- **Take a step beyond email alerts.** Email alerts are a good first step, but going beyond that and giving the user the ability to see a snapshot of their operations on a mobile device is a critical next step. Best-in-Class companies are twice as likely as Industry Average companies to provide access to job-related ERP information on a mobile device.
- **Set mobile device guidelines.** Have a corporate-wide set of rules and guidelines about what types of devices can be used where. Almost twice many Best-in-Class companies as all others have done this, which makes mobile ERP rollouts much smoother and more consistent. Also, the fact that only about half of management and sales are using their mobile devices to access ERP data should be a warning sign that more needs to be done to take advantage of those devices.

Best-in-Class Steps to Success

- **Get more people in the workflow.** Even though Best-in-Class companies have significantly better access to business process work flows, only 42% actually have this capability. Extending business process approvals, reviews, and other decision points out to mobile devices will significantly improve response times to exceptions and improve productivity. Not doing it will continue to let decisions languish on people's desktops while they are away from the desk.
- **Focus visualization and presentation on role-based information.** Even though better than everyone else, just over a third of Best-in-Class companies provided a role-based homepage on the mobile device. One consistent challenge to getting people to use mobile ERP is oft-attempted straight port of a desktop ERP screen to a mobile screen. Feedback from users has been fairly resounding in that they only want to see and act on information on the issue at hand. Role-based homepages clean out extraneous information and provide a clear and concise view of the issue at hand.

Whether a company is trying to move its mobile ERP strategy from Laggard to Industry Average, or Industry Average to Best-in-Class, following these steps will ensure that mobility and ERP do more than just meet by chance.

Aberdeen Insights — Summary

Mobility in ERP is almost as old as ERP. But companies are transitioning from very focused and dedicated mobile systems loosely linked to ERP to mobile systems tightly aligned with accessing ERP capabilities. Having the right device, for the right role, with the right ERP access will lead to improvements beyond a typical ERP implementation. Best-in-Class companies consistently outperform in both operational metrics and mobile ERP capabilities. Aligning your organization, your ERP system, your mobile strategy, and your business processes will lead to Best-in-Results.

How Does Your Performance Compare to the Best-in-Class?



- Compare your processes
- Receive a free, personal PDF scorecard
- Benefit from custom recommendations to improve your performance, based on the research

Take the Assessment

Receive Your Free Scorecard

Appendix A: Research Methodology

Between March and April 2011, Aberdeen examined the use, the experiences, and the intentions of 99 enterprises using mobile ERP strategies in a diverse set of enterprises.

Aberdeen supplemented this online survey effort with interviews with select survey respondents, gathering additional information on ERP strategies, experiences, and results.

Responding enterprises included the following:

- *Job title:* The research sample included respondents with the following job titles: CEO / President / CFO / CIO (26%); EVP / SVP / VP (10%); Director (22%); Manager (24%); and other (18%).
- *Department / function:* The research sample included respondents from the following departments or functions: corporate management (10%); finance / administration (4%); information technology (35%); manufacturing and operations (13%); logistics / supply chain (8%); and other (30%).
- *Industry:* The research sample included respondents from a wide cross section of industries. The sectors that saw the largest representation in the sample were manufacturing (49%); professional services (20%); wholesale / distribution (8%); and financial services (3%).
- *Geography:* The majority of respondents (69%) were from North America. Remaining respondents were from South / Central America and Caribbean (5%); the Asia / Pacific region (10%); the Middle East and Africa (3%); and Europe (13%).
- *Company size:* Twenty-six percent (26%) of respondents were from large enterprises (annual revenues above US \$1 billion); 30% were from midsize enterprises (annual revenues between \$50 million and \$1 billion); and 44% of respondents were from small businesses (annual revenues of \$50 million or less).
- *Headcount:* Twenty-two percent (22%) of respondents had less than 50 employees; 29% had between 50 and 500 employees; 11% had between 500 and 2,500 employees; 14% had between 2,500 and 10,000 employees; and 24% had more than 10,000 employees.

Study Focus

Responding executives completed an online survey that included questions designed to determine the following:

- √ The degree to which ERP is deployed in their organizations
- √ The availability of access to ERP throughout the organization
- √ The effect to which mobile access has enhanced existing ERP implementations
- √ The structure and effectiveness of existing ERP implementations
- √ Current and planned use of ERP
- √ The business benefits that have been derived from ERP initiatives

The study aimed to identify emerging best practices for mobile ERP usage and to provide a framework by which readers could assess their own management capabilities.

Table 5: The PACE Framework Key

Overview
<p>Aberdeen applies a methodology to benchmark research that evaluates the business pressures, actions, capabilities, and enablers (PACE) that indicate corporate behavior in specific business processes. These terms are defined as follows:</p> <p>Pressures — external forces that impact an organization’s market position, competitiveness, or business operations (e.g., economic, political and regulatory, technology, changing customer preferences, competitive)</p> <p>Actions — the strategic approaches that an organization takes in response to industry pressures (e.g., align the corporate business model to leverage industry opportunities, such as product / service strategy, target markets, financial strategy, go-to-market, and sales strategy)</p> <p>Capabilities — the business process competencies required to execute corporate strategy (e.g., skilled people, brand, market positioning, viable products / services, ecosystem partners, financing)</p> <p>Enablers — the key functionality of technology solutions required to support the organization’s enabling business practices (e.g., development platform, applications, network connectivity, user interface, training and support, partner interfaces, data cleansing, and management)</p>

Source: Aberdeen Group, April 2011

Table 6: The Competitive Framework Key

Overview	
<p>The Aberdeen Competitive Framework defines enterprises as falling into one of the following three levels of practices and performance:</p> <p>Best-in-Class (20%) — Practices that are the best currently being employed and are significantly superior to the Industry Average, and result in the top industry performance.</p> <p>Industry Average (50%) — Practices that represent the average or norm, and result in average industry performance.</p> <p>Laggards (30%) — Practices that are significantly behind the average of the industry, and result in below average performance.</p>	<p>In the following categories:</p> <p>Process — What is the scope of process standardization? What is the efficiency and effectiveness of this process?</p> <p>Organization — How is your company currently organized to manage and optimize this particular process?</p> <p>Knowledge — What visibility do you have into key data and intelligence required to manage this process?</p> <p>Technology — What level of automation have you used to support this process? How is this automation integrated and aligned?</p> <p>Performance — What do you measure? How frequently? What’s your actual performance?</p>

Source: Aberdeen Group, April 2011

Table 7: The Relationship Between PACE and the Competitive Framework

PACE and the Competitive Framework – How They Interact
<p>Aberdeen research indicates that companies that identify the most influential pressures and take the most transformational and effective actions are most likely to achieve superior performance. The level of competitive performance that a company achieves is strongly determined by the PACE choices that they make and how well they execute those decisions.</p>

Source: Aberdeen Group, April 2011

Appendix B: Related Aberdeen Research

Related Aberdeen research that forms a companion or reference to this report includes:

- [To ERP or Not to ERP: In Manufacturing, It Isn't Even a Question](#); March 2011
- [ERP in Complex Manufacturing](#); February 2011
- [SaaS ERP: Trends & Observations 2010](#); October 2010
- [ERP in SME: Fueling Growth and Profits](#); August 2010
- [ERP in Manufacturing 2010: Measuring Business Benefit and Time to Value](#); June 2010
- [SaaS ERP: Trends and Observations](#); December 2009
- [Beyond the Total Cost of ERP Ownership](#); June 2009
- [Enterprise Solution Strategies: The Value of an Integrated Suite](#); September 2009
- [ERP in the MidMarket 2009: Managing the Complexities of a Distributed Environment](#); August 2009
- [Measuring the ROI of ERP in SMB: Keeping ERP Projects Alive When You Need Them the Most](#); March 2009
- [Enterprise Applications: The Cost of Keeping Current...Or Not](#); January 2009

Information on these and any other Aberdeen publications can be found at www.aberdeen.com.

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For more than two decades, Aberdeen's research has been helping corporations worldwide become Best-in-Class. Having benchmarked the performance of more than 644,000 companies, Aberdeen is uniquely positioned to provide organizations with the facts that matter — the facts that enable companies to get ahead and drive results. That's why our research is relied on by more than 2.5 million readers in over 40 countries, 90% of the Fortune 1,000, and 93% of the Technology 500.

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