

Field Service 2011

Key Trends in Workforce Management

January 2011

Sumair Dutta, Aly Pinder, Jr.

~ Underwritten, in Part, by ~



Executive Summary

Attendees at Aberdeen's 2010 [Chief Service Officer \(CSO\) Summit](#) indicated that field service was the top area of improvement for their service organizations in 2011. This was supported by respondents to Aberdeen's [State of Service Management](#) (September 2010) research project, where in survey respondents indicated that field service was a top three area of focus for 2011 along with improved performance management and knowledge sharing. As opposed to just relying on scheduling changes to drive more from a day-to-day execution, Best-in-Class CSO's are beginning to invest in tools and processes around planning and employee management that allow the field worker to be more effective in the delivery of service.

Best-in-Class Performance

In December 2010 and January 2011, Aberdeen Group surveyed over 300 service professionals. Those defined as Best-in-Class exhibited the following:

- 93% current performance in customer retention (77% for all others) and a 11% increase in service revenue over the previous 12 months
- 74% level of workforce utilization (60% for all others) and a 9% increase in workforce productivity over the previous 12 months
- 91% compliance with stated response or project completion times (74% for all others)

Competitive Maturity Assessment

Survey results show that the firms enjoying Best-in-Class performance are:

- Fifty-four percent (54%) more likely (40% vs. 26%) than all others to create field service schedules in real-time
- Nearly two times as likely as Laggards to forecast and plan for future service demand
- Sixty-eight percent (68%) more likely (47% vs. 28%) than all others to leverage field service management applications
- Nearly two times as likely as Laggards to measure employee engagement on a quarterly or more frequent basis

Required Actions

To achieve Best-in-Class performance, companies must:

- Strengthen service forecasting and planning capabilities
- Move towards centralized scheduling and increase scheduling frequency
- Increase frequency of on-the-job training for field workers
- Improve employee management via increased performance insight

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

"It [effective field service workforce management] is critical in our business. My staff is involved in the installation of the majority of equipment that we sell; as well, due to the nature of the product, only a small percentage of customers are able to perform much in the way of self service. We also do a significant amount of the preventative maintenance and also provide onsite support during many events (especially for collegiate and professional sports). So, our Field Engineers interact with our customers regularly, and for many customers they are considered the main component of our service offering."

~ Daniel Schulte,
Field Service Manager,
Daktronics

Table of Contents

Executive Summary.....	2
Best-in-Class Performance.....	2
Competitive Maturity Assessment.....	2
Required Actions.....	2
Chapter One: Benchmarking the Best-in-Class.....	5
Fielding the Best Team.....	5
Redefining Workforce Management.....	6
The Maturity Class Framework.....	11
The Best-in-Class PACE Model.....	13
Best-in-Class Strategies.....	14
Chapter Two: Benchmarking Requirements for Success.....	16
Competitive Assessment.....	17
Capabilities and Enablers.....	19
Chapter Three: Required Actions.....	26
Laggard Steps to Success.....	26
Industry Average Steps to Success.....	27
Best-in-Class Steps to Success.....	27
Appendix A: Research Methodology.....	29
Appendix B: Related Aberdeen Research.....	31
Featured Underwriters.....	32

Figures

Figure 1: The Need for Better Field Service.....	5
Figure 2: Getting up to Speed.....	8
Figure 3: Keeping it In House.....	9
Figure 4: Structuring Forecasts and Plans.....	10

Tables

Table 1: Average Field Service Results.....	6
Table 2: Self-Assessment Scorecard - Employee Management.....	7
Table 3: Self Assessment Scorecard - Planning.....	9
Table 4: Self Assessment Scorecard - Scheduling.....	10
Table 5: Where's My Service?.....	11
Table 6: Top Performers Earn Best-in-Class Status.....	11
Table 7: The Best-in-Class PACE Framework.....	14
Table 8: Building Field Strength.....	15
Table 9: The Competitive Framework.....	18
Table 10: Scheduling Frequency.....	20
Table 11: Planning Service Requirements.....	21
Table 12: Looking Inward.....	22

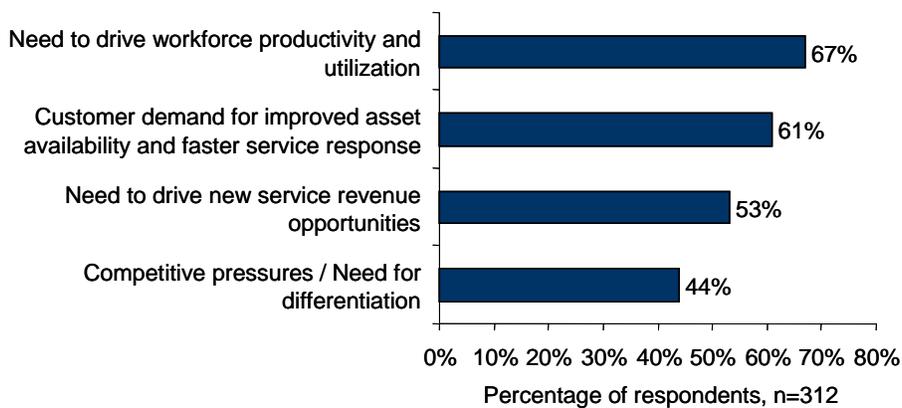
Table 13: Recognition and Reward.....	23
Table 14: Enabling Field Excellence.....	24
Table 15: Extending the Enterprise.....	25
Table 16: The PACE Framework Key.....	30
Table 17: The Competitive Framework Key.....	30
Table 18: The Relationship Between PACE and the Competitive Framework	30

Chapter One: Benchmarking the Best-in-Class

Fielding the Best Team

The continued focus on field service excellence by service organizations is warranted as Aberdeen's recent survey data of over 300 organizations in December 2010 and January 2011 reflects that 58% of incoming service requests ultimately require a field dispatch of sorts. Given that these field agents are quite often the only representatives of the organization that actually visit the customer, especially after the sale of the product, their ability to provide desired or better support in a timely manner goes a long way in setting customer perceptions of the service organization's aptitude.

Figure 1: The Need for Better Field Service



Note: Respondents were asked to select the top four answer choices for their organization
Source: Aberdeen Group, January 2011

In meeting and beating customer expectations for service excellence, organizations are also faced with the task of ensuring that they are able to drive the maximum from available service resources, the number one pressure for field service improvement (Figure 1). Aberdeen's 2011 survey indicates that organizations aren't making significant hiring investments in field workers or dispatchers in 2011 to meet customer needs. In fact, respondents indicate that they plan on increasing their dispatch workforce by a mere 1% in the next 12 months with a 4% increase planned for field workers.

With those intentions, organizations will definitely seek to improve on the average reported 63% level of workforce utilization, thereby indicating that field agents at service organizations are idle or non-productive nearly 40% of the time (Table 1). Aberdeen's research also indicates that field workers are attending to a little more than three work orders a day on average, on par with the results seen from a 2010 survey on the topic. Larger organizations with over 500 field workers indicate that they are able to drive nearly 4.2

Fast Facts

- ✓ Best-in-Class organizations report a 90% level of customer retention compared to a 77% performance for all other organizations
- ✓ 77% of service employees at Best-in-Class companies report being engaged as opposed to 57% of employees at Laggard organizations
- ✓ Best-in-Class organizations are nearly two times as likely as all other organizations to prioritize the sharing of service information across the enterprise

“Effective field service workforce management is very important in ensuring we deliver excellent customer service. They [field techs] are the face of our company during their on-site engagement.”

~ Barb Bartlett,
Services Marketing Manager,
Brady North America

tasks a day from their field workers when compared to 2.5 tasks a day for organizations with less than 50 workers. That said, utilization levels across these organizations range from 62% for the smaller organizations to 65% for larger organizations, not indicating a significantly greater level of efficiency at larger organizations.

Table 1: Average Field Service Results

Finding	Average for All Respondents
Work orders completed daily per worker	3
Miles driven daily per worker	70
Average workforce utilization	63%

Source: Aberdeen Group, January 2011

As Aberdeen's service management research has indicated throughout 2010, organizations are beginning to look at service as a driver for revenue opportunities, a fact that is further supported by the 53% of organizations looking to improve field performance in support of revenue initiatives. Given the personal face-to-face connection that field agents are often afforded with the customers and the information that they are able to access onsite, these field agents are in an ideal position to identify revenue opportunities attached to additional products and services.

To close out the discussion on pressures, it is important to note that cost continues to be a driving factor for improved field service performance. While not at the top of the chart with regard to pressures (Figure 1), 38% of organizations indicated the need for better control of labor-related costs with an additional 16% indicating the need to reign in vehicle-related costs.

Redefining Workforce Management

Aberdeen's [2010 CSO Summit](#) also served to highlight the growing role that service leaders are taking in developing their service workforces and in ensuring that their workers are equipped with the necessary tools and information to complete their tasks and meet customer expectations. More so, service leaders were also taking an active stake in ensuring a greater level of service employee engagement and satisfaction and in linking these HR-focused metrics to improved service performance. This was made evident in a joint presentation by the Service and HR leaders at Pitney Bowes, who were able to reap improved productivity and customer satisfaction scores as a result of improved employee engagement.

Traditionally field service workforce management and research tied to the topic has focused on the scheduling element, therefore indicating steps needed to improve day-to-day execution. This execution piece continues to be extremely important, but is further supported by improved planning and increased investments made in worker engagement and satisfaction. Given the discussions at the CSO Summit, this particular research report on field

CSO Summit Results

To view the results of Pitney Bowes's employee engagement journey, visit the [CSO Summit 2010 event highlights page](#). Also, take a few moments to learn about and sign up for [the 2011 CSO Summit](#).

service will serve to identify trends and best practices across the spectrum of workforce management, including:

- Field employee management
- Forecasting and planning
- Service scheduling

Checking the Grades

In each one of the areas of workforce management highlighted above, Aberdeen's field service research was able to gauge how service leaders evaluated their capabilities.

Employee Management

As stated earlier, respondents to Aberdeen's survey revealed that they weren't looking to make significant investments in their field service workforces in 2011. In spite of that, service executives indicated a slightly above average self-assessment with regard to finding and hiring skilled workers (Table 2). Employee referrals and job search websites were indicated as the top sources of new employee hires as reflected by 57% and 49% of respondents respectively. A little more than one-fourth of respondents indicated the use of third-party recruiters or search firms.

Table 2: Self-Assessment Scorecard - Employee Management

Capability	Average. 1-Poor, 3- Average, 5- Excellent
Retain desired workers	3.8
Effectively train field workers	3.4
Compensate field workers appropriately	3.4
Find/source skilled workers	3.3
Enable workers to be productive within desired time	3.3
Provide performance-based incentives	2.8

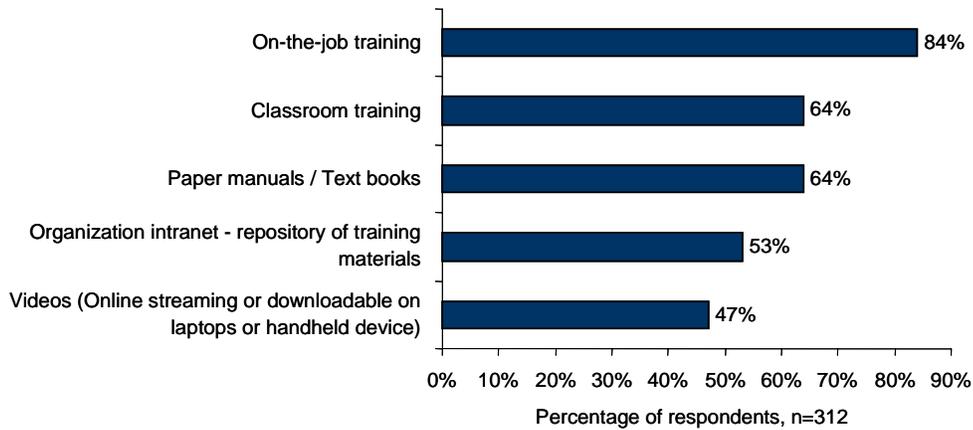
Source: Aberdeen Group, January 2011

Hiring Criteria (Average Result)
(1-Not Important, 5-Extremely Important)

- √ 4.0 - Technical Skills
- √ 3.9 - Customer Interaction Skills
- √ 3.7 - Past Experience
- √ 2.9 - Education Level
- √ 2.6 - Familiarity with Workforce Applications

Once workers were on board, respondents also indicated a slightly above average self-assessment score in being able to effectively train employees to enable them to be productive in meeting and solving customer issues. Respondents indicated using a plethora of tools to get their workers up-to-speed, ranging from on-the-job training to the use of paper manuals, videos and collaborative tools and technologies (25% of respondents) (Figure 2).

Figure 2: Getting up to Speed



Note: Respondents were asked to select all answer choices that apply
Source: Aberdeen Group, January 2011

In addition to the provision of training materials and tools, polled organizations indicated that they performed at near 'average' level in being able to compensate their workers at a competitive rate. An area where organizations performed at below par was in the provision of performance-based incentives to their service workers, tied to productivity and profitability. Leading organizations to Aberdeen's survey (introduced later in this chapter) indicated several best practices tied to the alignment of performance-based incentives with key service metrics. These practices will be revealed in Chapter Two.

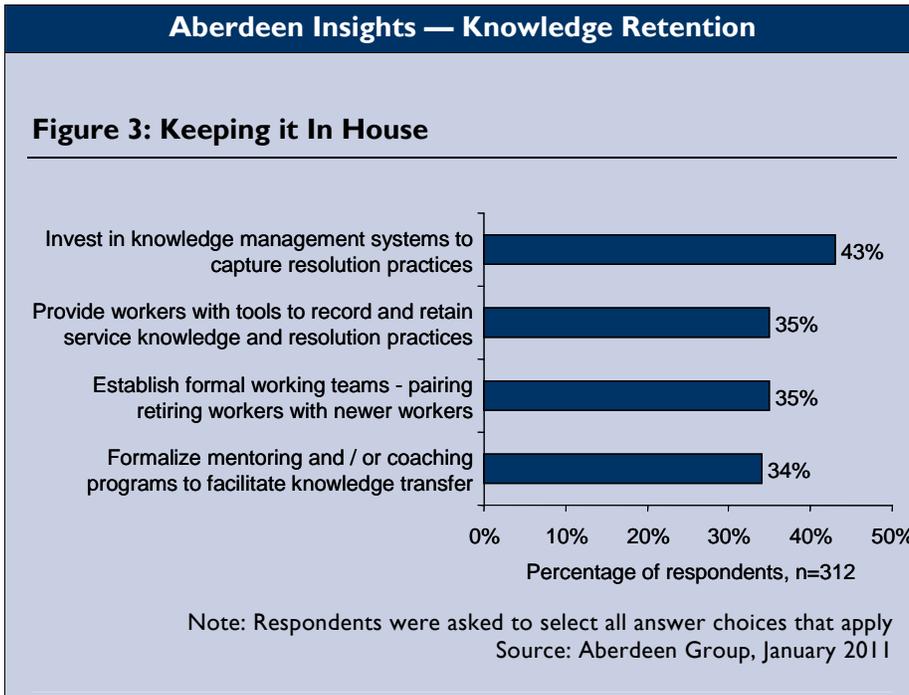
“We have found that training is the most important element in generating desired performance coupled with immediate and scheduled feedback.”

~ William (Bill) Carroll,
Manager, Clinical Engineering,
Aurora Health Care

Aberdeen Insights — Knowledge Retention

There has been significant amount of chatter on the fact that organizations are faced with an aging service workforce and there will be a dire need to retain the skills and tribal knowledge of these retiring workers. At this stage, it looks like most service organizations aren't extremely worried about the knowledge loss tied to a retiring workforce with 56% of respondents indicating that it isn't an issue. Perhaps this is explained by the fact that the average age for field workers for Aberdeen's survey respondent base was 36 years, with only 1% of the respondents indicating an average age of 50 years or more. For the 44% who are concerned, they are actively taking steps (Figure 3) to leverage solutions and formal work groups to ensure that the knowledge of tenured workers is stored and kept within the organization.

continued



Forecasting and Planning

While organizations reported an average level of performance in acquiring, training and retaining their workers, they indicated a below average assessment of their ability to locate and provision these workers to drive utilization and meet service demand (Table 3). This is not surprising given that 44% of respondents to Aberdeen's research revealed that their organizations did not forecast service demand to appropriately allocate service resources.

Table 3: Self Assessment Scorecard - Planning

Capability	Average. 1- Poor, 3- Average, 5- Excellent
Accurately forecast service demand	2.8
Manage/maintain resource levels to drive maximum utilization	2.9

Source: Aberdeen Group, January 2011

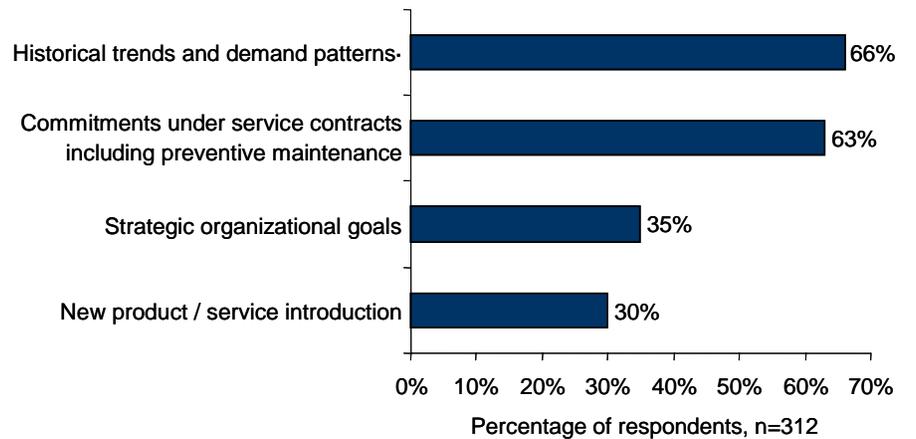
Of those organizations that did forecast service demand or engage in resource planning activities, 44% indicated that these responsibilities resided with service executives with another 26% leveraging function-specific managers (field service, fleet, parts) to forecast and plan for future service demand. Sixteen percent (16%) utilized a service planning specialist or team. These executives and teams primarily developed their plans based on historic demand patterns and trends coupled with forward looking

Forecasting and Planning Goals (Percentage of respondents, n=312)

- √ 70% - Improve Workforce Utilization
- √ 48% - Provision Resources Effectively to Meet All Service Demand
- √ 31% - Provision Resources to Meet Contractual Commitments

contractual commitments (Figure 4). Organizational goals tied to cost, revenue, productivity and customer satisfaction were also leveraged in the development of resource allocation plans.

Figure 4: Structuring Forecasts and Plans



Note: Respondents were asked to select the top three answer choices for their organization
Source: Aberdeen Group, January 2011

Service Scheduling

From a day-to-day perspective, respondents once again indicated a near average level of performance in scheduling technicians to meet customer or contractual commitments. In fact, respondents reported a 77% level of compliance in meeting stated response or completion goals, an area where the leading organizations revealed a significant advantage over all others.

“Workforce management is very important in delivering customer service, specifically as it relates to timeliness. Our customers typically require site visits during scheduled maintenance days, and cannot accept being delayed by our scheduling. Unfortunately, our maintenance scheduling is also subject to project schedule changes, requiring us to be very flexible with regard to worker assignments.”

~ Vice President of Technical Services,
Metal Equipment OEM

Table 4: Self Assessment Scorecard - Scheduling

Capability	Average. 1-Poor, 3-Average, 5-Excellent
Schedule technicians to meet customer/SLA commitments	3.2
Leverage third-parties effectively	3.0
Capture and share technician knowledge	2.9

Source: Aberdeen Group, January 2011

Scheduling is made more difficult by the fact that most service dispatches continue to be reactive in nature, either in response to an emergency or in response to an issue where a product or asset isn't functioning as desired. Not only does this place a significant level of strain on the resources of the service organization, but it also increases the probability of dissatisfied customers who are required to wait with non-performing assets.

Most organizations are fairly responsive with regard to getting their field agents on site. On average organizations responding to Aberdeen's research revealed that their technicians arrive on site usually within two days of a service ticket being logged, with 34% indicating a 24-hour response window. Organizations also reported taking steps to reduce the wait windows provided to customers. While 39% still provided a 'technician will be there between 9 to 5 on Monday' window to their customers, nearly a similar proportion (38%) were providing much shorter one or two-hour windows to help reduce the wait-related inconvenience felt by the customer.

Table 5: Where's My Service?

Requested Wait Window Currently Offered	Percentage of respondents, n=312
1-hour	16%
2-hour	22%
4-hour	35%
6-hour	9%
12-hour or Full Day	39%

Note: The total is greater than 100% indicating organizations use a combination of wait windows
Source: Aberdeen Group, January 2011

The Maturity Class Framework

Best-in-Class delivery of field service requires the effective co-ordination of activities and capabilities in all areas of the workforce management spectrum, resulting in the successful navigation of pressures highlighted in Figure 1. As such, Aberdeen's framework to determine the Best-in-Class (Table 6) is based on a combination of metrics that reveal proficiency in the management of customer needs and internal mandates regarding productivity, utilization, and revenue. As the table reveals, respondents are rewarded not only for the success in current performance but also for their ability to move these metrics in the right direction.

Table 6: 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"> ▪ 90% Success rate in meeting response or project completion deadlines ▪ 74% Workforce Utilization ▪ 93% Customer Retention ▪ 9% Increase in Productivity over the previous 12 months ▪ 11% Increase in Service Revenue over the previous 12 months

Definition of Maturity Class	Mean Class Performance
<p>Industry Average: Middle 50% of aggregate performance scorers</p>	<ul style="list-style-type: none"> ▪ 79% Success rate in meeting response or project completion deadlines ▪ 64% Workforce Utilization ▪ 81% Customer Retention ▪ 8% Increase in Productivity over the previous 12 months ▪ 7% Increase in Service Revenue over the previous 12 months
<p>Laggard: Bottom 30% of aggregate performance scorers</p>	<ul style="list-style-type: none"> ▪ 63% Success rate in meeting response or project completion deadlines ▪ 48% Workforce Utilization ▪ 68% Customer Retention ▪ 1% Increase in Productivity over the previous 12 months ▪ 4% Increase in Service Revenue over the previous 12 months

Source: Aberdeen Group, January 2011

Addressing the pressures in order, Best-in-Class organizations are driving an average 74% of utilization from their field workers when compared to a 60% average performance among all other organizations (Industry Average and Laggard organizations combined). Laggards report a 48% level of utilization wherein their workers spend a greater amount of time being idle on non-productive tasks. Beyond utilization, Best-in-Class organizations have also been the most successful in driving productivity levels within their service teams over the previous 12 months. A portion of this is attributable to a significantly higher success rate in completing service tasks on a first-visit basis (90% for Best-in-Class vs. 71% for all others), therefore allowing field technicians to judiciously get to additional service tasks.

With faster first-time fix rates and greater productivity levels, it isn't surprising to note that the Best-in-Class report higher levels of compliance with required response or project completion deadlines. These deadlines could either be included in service contracts or promised to customers. And success in meeting these promises results in the Best-in-Class retaining more than 90% of their customers on a year-over-year basis, as compared to an average 77% level of customer retention among all others.

With the aid of a satisfied and loyal customer base, the Best-in-Class are also able to drive increases in service revenue opportunities over the previous year, to the tune of 11% when compared to a 6% increase for all other organizations.

“[Effective field service workforce management] is very important. And I assume the key word is ‘management.’ Customers expect service to fix the issue quickly, on time and in one visit. The management issue extends back into the home organization though. If management cannot find the right metrics to manage to, and provide this level of service, they will quickly find it is a loss making venture.”

~ National Customer Care Director,
Telecommunications Company

Aberdeen Insights — Linking Employee Engagement to Performance

While not considered in the determination of Best-in-Class, it is vital to note that Best-in-Class organizations report a higher (77% for the Best-in-Class vs. 68% for the Industry Average and 57% for Laggards) level of employee engagement (measured as a percentage of employees reporting that they are engaged in a worker survey). As highlighted earlier, leading organizations are focused on ensuring that their employees are linked into the vision of the service organization to enable them to take a greater stake in driving needed improvements in productivity, profitability and customer service. While a link in improved engagement and improved performance with regards to utilization and customer retention is suggested by the Best-in-Class performance gap in both, it is further consolidated when considering:

- Organizations reporting greater than 70% levels of engagement reflect an average 69% performance in workforce utilization; when compared to a 56% level of utilization for organizations reflecting below 70% levels of engagement
- Similarly, organizations reporting greater than 70% levels of engagement reflect retention rates of 87% when compared to a 72% retention performance for those with sub 70% engagement levels

More so, the greater than 70% level of engagement group have seen a 8% increase in service revenues over the previous 12 months when compared to a 7% increase for those reporting sub 70% engagement levels. While engagement isn't the sole cause for improved performance, there certainly is a greater link developing between a more engaged and a more successful field service workforce.

“For Avnet, as a service company in a service industry, nothing else matters if we don't have high levels of employee engagement.”

~ Steve Church, Chief
Operations Excellence Officer,
Avnet (at Aberdeen Group's
2010 HCM Summit)

The Best-in-Class PACE Model

Aberdeen's PACE framework is designed to highlight the key strategies and capabilities employed by firms that attain Best-in-Class status through their excellence in meeting and overcoming internal or market pressures. The framework serves as a roadmap for firms to duplicate the strategies enforced and capabilities developed by Best-in-Class firms to improve their service performance (Table 7).

Table 7: The Best-in-Class PACE Framework

Pressures	Actions	Capabilities	Enablers
<ul style="list-style-type: none"> Need for increased productivity / utilization 	<ul style="list-style-type: none"> Invest in mobile tools to provide field agents with improved access to information in the field Make captured service information available across the enterprise 	<ul style="list-style-type: none"> Centralized scheduling of service resources Frequent creation of service schedules (2 times or more frequent daily) Service executives and function leaders have responsibility for forecasting and planning Customers have increased access to create tickets, order parts and view service status Field technician incentives tied to profitability and customer feedback Quarterly or more frequent measurement of employee engagement 	<ul style="list-style-type: none"> Field service management solutions Parts tracking solutions Service Management or ERP system with scheduling functionality Mobile field service application Technicians have mobile access/ability to: <ul style="list-style-type: none"> - accept service schedules - change status or estimated time of completion - view available part inventories Workforce management systems - HR-specific for payroll, timesheets etc. Resource planning solutions

Source: Aberdeen Group, January 2011

Best-in-Class Strategies

The Best-in-Class strategic roadmap to continue to drive success in meeting productivity and customer satisfaction pressures is dominated by investments in technology and knowledge management.

More than one half of Best-in-Class organizations are looking to boost productivity by continuing to equip their field technicians with mobile devices and workflows in order to:

- Provide them with better work-related information in the field
- Reduce paperwork associated with service tasks

In Aberdeen's March 2010 [Mobile Field Service](#) research, organizations that were leveraging mobile tools were able to see a 23% boost in productivity, partially tied to the reduced amount of paper forms and administrative tasks required from field workers.

Along the theme of automation, Best-in-Class organizations continue to look for better visibility into their field resources and assets so as to drive scheduling efficiency. As these organizations rely on the location and status of their resources as scheduling inputs, it is vital to have real-time access in order to develop a truly optimal schedule. Inaccurate information fed into even the most optimized scheduling algorithm will only yield a sub optimal service schedule leading to lower levels of utilization, productivity and customer satisfaction.

“The implementation of detailed KPIs has driven the largest impact on field service productivity. Through the simple act of measuring and comparing data across centers, we have been able to prioritize and implement a number of targeted improvement initiatives which have directly driven a productivity improvement of nearly 30% while dramatically improving service levels.”

~ Brian Lucyk,
Vice President,
Central Operations,
Pendum LLC

Table 8: Building Field Strength

Strategic Actions	Percentage of respondents	
	Best-in-Class	All Others
Invest in mobile tools to provide technicians with better access to information in the field	56%	51%
Make captured service information available across the enterprise	56%	29%
Develop real-time visibility into field assets (equipment, vehicles, technicians) - in terms of location and capacity	49%	43%
Develop programs and tools to retain knowledge of current workforce	40%	27%

Note: Respondents were asked to select the top five answer choices for their organization
 Source: Aberdeen Group, January 2011

In addition to investments in automation, the Best-in-Class are keenly interested in capturing, storing and sharing service knowledge across the organization. While knowledge retention is increasingly important for those organizations faced with employee turnover and retirement (see Analyst Insight), the sharing of service knowledge across the organization is vital in opening up new opportunities for service revenue. In Aberdeen's [State of Service Management research](#) (September 2010), 90% of organizations indicated that it was extremely important for service to be connected with other businesses within the organization, such as sales, marketing, and product development. These organizations considered it vital to use this connectivity to draw a true end-to-end perspective of the customer in order to ensure a better customer experience while allowing for the discovery of net new revenue opportunities.

Chapter Two: Benchmarking Requirements for Success

Along the lines of the workforce management spectrum established in Chapter One, successful service delivery also depends on the supporting cast of organizational capabilities and processes in place. The identification of these vital capabilities, specifically around scheduling frequency, planning discipline, knowledge sharing and performance management, and the organizational gaps that need to be overcome to put these in place will help service firms ascend to the status of Best-in-Class.

Case Study — Large North American Telecommunications Company

A large North American telecommunications company which provides a wide range of services has over 2,500 field technicians that install and repair telecommunications equipment for residential, business, and construction customers.

The telecommunications industry in North America is highly competitive, and therefore the company is constantly challenged with ensuring that it continues to provide increased value to the market and its customers. Not only does the company need to consistently enhance the customer experience, but it must also balance the need to drive greater efficiency and utilization from its field technicians as this increased level of service is being delivered. If these two sometimes competing pressures were not enough to manage, the company also needed to find a way to have its disparate home-grown systems communicate with each other to provide both management and the field with the information necessary to service the customer.

In 2010, the telecommunication company implemented a mobile workforce management solution (including order management, dynamic scheduling, and mobile) to augment its home-grown systems to support its field operations. With this workforce management solution, the company has been able to provide its field technicians, management team, and customers with the right information to positively impact the overall service experience. Not only has the amount of information available increased [work orders, customer/product information, etc.], field techs now have increased mobile capabilities which directly impact their efficiency while also providing customers with more visibility into the issue resolution process. With increased visibility and better information, all involved stakeholders (customer, management, field tech) have ownership of the service experience.

continued

Fast Facts

- √ 53% of Best-in-Class organizations schedule service orders two times a day or more frequently compared to 38% of all others
- √ Technicians at Best-in-Class organizations are two times as likely as those at Laggards to leverage mobile applications for work order management
- √ Best-in-Class service organizations are nearly two times as likely as Laggards to forecast and plan for future service demand
- √ 27% of Laggards have no visibility into employee engagement

“Our overarching challenge was business utilization. The reality is if we can find ways to be more efficient with our current resources we can leverage this increased productivity to enhance the customer experience.”

~ Executive,
Large North American
Telecommunications Company

Case Study — Large North American Telecommunications Company

The company has been able to achieve measurable gains in a number of performance metrics based on the implementation of its workforce management solution. The company has seen a 25% improvement in worker productivity over the last 12 months. The company has also been able to provide a reduced time to issue resolution for its customers. Because customers continue to request faster, more efficient issue resolution from service providers, the ability to improve this metric is key to providing customers with the service they demand. The company has also been able to leverage increased visibility into the field operations to provide management with the information necessary to improve processes to improve the customer experience.

The journey to provide customers with a heightened experience is not over yet. The company is looking to expand its implementation of a field service solution across more of its coverage regions. The company hopes to be able to replicate its current success across the business bringing an enhanced service offering to more of its customers. The company will also look to continue to identify and provide the right tools for its field technicians to enable faster issue resolution. The North American telecommunications company looks to remain on the path of providing its customers with more value and ultimately an enhanced service experience.

Competitive Assessment

Best-in-Class service firms, as determined by their performance in key indicators, exhibit several of the capabilities highlighted in Table 9 that fall into the five categories of Aberdeen's Competitive Framework: (1) **process** (workflows tied to schedule creation and delivery); (2) **organization** (corporate focus on the opportunity for improved customer service through increased planning and oversight); (3) **knowledge management** (making service data available to stakeholders that can act on the information to impact profitability); (4) **technology** (the selection of appropriate tools and the intelligent deployment of those tools); and (5) **performance management** (the ability of the organization to track / measure performance, and to make service delivery and employee management process changes with the aid of enhanced performance information).

Table 9: The Competitive Framework

	Best-in-Class	Average	Laggards
Process	Service schedules created two times a day or more frequently (4 times or in real-time):		
	53%	37%	35%
	Make technicians aware of next task either during previous task or immediately upon completion:		
	51%	45%	39%
	Preventive maintenance is major component of dispatch mix:		
	51%	32%	24%
Organization	Service organization engaged in forecasting service demand and developing resource plans:		
	67%	63%	39%
	Centralized scheduling of service resources:		
	64%	53%	44%
Knowledge	Measure employee engagement on a quarterly or more frequent basis:		
	36%	27%	19%
Knowledge	Service ticket or technician status alerts made available to customers via email or text:		
	47%	30%	23%
Technology	Customers have online portal to create service tickets:		
	47%	39%	32%
	Field service applications currently in use:		
	<ul style="list-style-type: none"> ▪ 47% Field Service Management ▪ 47% Dispatch Management ▪ 44% Parts Tracking ▪ 36% Mobile Field Service Application 	<ul style="list-style-type: none"> ▪ 34% Field Service Management ▪ 36% Dispatch Management ▪ 27% Parts Tracking ▪ 32% Mobile Field Service Application 	<ul style="list-style-type: none"> ▪ 19% Field Service Management ▪ 18% Dispatch Management ▪ 19% Parts Tracking ▪ 18% Mobile Field Service Application
Performance	Technician incentives tied to service organization profitability:		
	44%	41%	27%
	Service performance used to evaluate and modify scheduling criteria:		
	44%	26%	24%

“Being in a very competitive environment, it is imperative that any technology implementation be successful. The key was to ensure that any upgrade in technology capabilities could easily integrate with our legacy home-grown systems.”

~ Executive, Large North American Telecommunications Company

Source: Aberdeen Group, January 2011

Capabilities and Enablers

The Competitive Framework (Table 9) highlights that Best-in-Class performance isn't predicated on excellence in one of the support categories. Best-in-Class organizations exhibit a comprehensive focus on all of the following support structures to execute against planned strategic actions (Table 8). In the case of the field service organization, these capabilities essentially enable the improved management of field resources to ensure greater allegiance to the service organization's vision.

Process

In the entire process of service scheduling, from schedule creation all the way to service work order acceptance and closure by the technician, Best-in-Class organizations exhibit unique capabilities that enable them to drive greater productivity. It should be noted that scheduling for the Best-in-Class and all others isn't just limited to scheduling of simple tasks where a single technician attends to a single task at a customer site and then moves on to another customer site. In fact, according to survey respondents, 22% of tasks that are scheduled involve crews and stretch over multiple days. A majority of these complex tasks are planned a week or a month in advance and usually span over a couple of days (see sidebar).

More so, scheduling of tasks also involves the use of third-party workers, who account for nearly 20% of all scheduled tasks. Sixty-percent (60%) of survey respondents indicated that their reliance on third-parties had remained the same over the previous 12 months with 52% forecasting that their reliance will be unchanged looking out into the next 12 months. Larger organizations (more than 500 field workers) tended to be slightly more reliant on third-parties, leveraging them for 29% of tasks on average when compared to 17% for smaller service organizations (less than 50 field workers). From a Best-in-Class perspective, 44% of leading organizations claimed that they were responsible for the scheduling of third-parties when compared to 33% of all other organizations, thereby inferring a more centralized scheduling model for the Best-in-Class encompassing all service workers.

Schedule Creation

The Best-in-Class are more reliant on the use of real-time scheduling when compared to all other organizations. This means that for the leading organizations, a service work order is scheduled, based on pre-determined criteria, as soon as it is created (Table 10).

Complex Work

How far in advance are complex tasks planned?

- √ 4% day in advance
- √ 12% during the week
- √ 25% week in advance
- √ 37% month in advance
- √ 26% quarter or year in advance

What is the average duration?

- √ 11% hours
- √ 8% one day
- √ 32% two-three days
- √ 22% one week
- √ 14% two weeks or a month
- √ 9% more than a month

Table 10: Scheduling Frequency

Frequency of Creation	Percentage of respondents	
	Best-in-Class	All Others
Fully optimized, scheduled as created	40%	26%
Four or two times a day	13%	12%
Once daily	24%	27%
Once every two-three days or Once a week	20%	22%
Less frequent than once a week	11%	2%

Source: Aberdeen Group, January 2011

Fifty-three percent (53%) of the Best-in-Class schedule service orders two times a day or more frequently when compared to 38% of all others. Conversely, 11% of Laggards schedule work orders once every two weeks or once a month compared to none of the Best-in-Class. To isolate the value of frequent scheduling, for all organizations that scheduled work orders two times a day or more frequently, they experienced an average workforce utilization rate of 66% when compared to a 62% performance for those organizations that scheduled work orders on a weekly or less frequent manner. More so, the more frequent scheduling organizations experienced a near 8% increase in productivity over the previous 12 months, when compared to a 6% increase for the less frequent group.

For scheduling these service work orders in a dynamic manner, 62% of the Best-in-Class rely on service applications ranging from fully optimized scheduling tools to broader service management tools that support scheduling. This is discussed further in the technology section.

Scheduling Windows

As reflected in Chapter One, all organizations are looking to provide shorter wait windows to their customers. The Best-in-Class have taken the lead in providing shorter wait windows to their customers with 22% providing one hour windows compared to 14% of all others. While the most popular wait window provided by the Best-in-Class is four hours (38%), they are much less likely than all others to provide full day wait windows (24% for the Best-in-Class vs. 34% for all others).

Delivery of Work Orders

With the focus on more frequent scheduling, Best-in-Class organizations also have the luxury of being more frequent in the delivery of work orders to their service technicians. Therefore, 51% of the Best-in-Class provide their technicians with visibility into their next work order either during or immediately upon completion of the previous work order. Only 41% of all other organizations have the capability to do this with 20% relying on the

Scheduling Criteria (Percentage of respondents)

Regular Work:

- √ 73% Technician skills / qualifications
- √ 67% Technician proximity to customer site
- √ 53% Technician capacity / workload
- √ 48% Nature / priority of work

Complex Work:

- √ 56% Technician Skills / Qualifications / Certifications
- √ 39% Technician familiarity with team / task
- √ 39% Technician capacity / workload
- √ 31% Nature / priority of work

provision of work orders at the beginning of the day (compared to 7% of the Best-in-Class).

To accept, adjust, manage and close work orders, technicians at Best-in-Class organizations are two times as likely as Laggards (36% vs. 18%) to be equipped with mobile field service applications that greatly reduce the opportunity for errors or time wasted in using paper forms and schedules. Sixteen percent (16%) of Laggards have their technicians pick up a schedule at the beginning of the week.

Organization

Even with the tools leveraged to dynamically create and dispatch service work orders, it should be noted that the Best-in-Class are much more likely to be dispatching service technicians for the purpose of preventive maintenance when compared to all other organizations. When asked about the top three reasons for technician dispatch, 51% of the Best-in-Class indicated that dispatches were made for preventive reasons as opposed to 29% of all others.

The shift towards increasing the proportion of predictive tasks is made possible as a result of increased visibility into service performance which also allows a greater focus on demand forecasting and resource planning.

From a scheduling perspective, 40% of the Best-in-Class organizations indicate that their service executive has on-demand visibility into service performance when compared to 31% of all other organizations. This in turn has enabled these organizations to centralize the scheduling of service resources as opposed to being reliant on a more regional model. Sixty-four percent (64%) of the Best-in-Class schedule resources centrally as opposed to 50% of all other organizations. With a centralized oversight model, Best-in-Class organizations are afforded a comprehensive view of all work orders and all service resources and are therefore not limited in their ability to make necessary adjustments to meet required response or completion times.

The increased visibility into real-time data across the entire service organization also allows service executives the ability to forecast service demand and plan resources accordingly.

Table 11: Planning Service Requirements

Organization is Focused on Service Forecasting and Planning	Percentage of respondents
Best-in-Class	67%
Industry Average	63%
Laggards	39%

Source: Aberdeen Group, January 2011

“Field workforce planning is essential to delivering excellent customer service while actively managing our cost structure. As field labor is our single largest cost of service delivery, the ability to effectively plan capacity is our largest controllable lever to optimize short-term profitability. We currently utilize customized reporting from our case management tool along with manual manipulation of scheduling and mapping to assist us in workflow planning.”

~ Brian Lucyk,
Vice President,
Central Operations,
Pendulum LLC

The responsibility for the development of forecasts and resource plans at Best-in-Class organizations is split between the service executive team and functional leaders of field service, dispatch and parts management, and just as more frequent scheduling enables greater organizational performance (i.e. workforce productivity), so to does forecasting and planning. In fact, Aberdeen's research shows that organizations engaged in forecasting and planning report 65% and 79% performance levels in workforce utilization and compliance with response or project completion timelines (respectively) as compared to a 60% and 75% performance in these metrics for organizations that don't undertake any forecasting and planning. While incremental value on forecasts and plans is dependent on the inputs and criteria used, it is clear that it is an important step in ensuring the efficient delivery of field service.

Performance Management

In addition to being more diligent in developing service schedules and more focused on developing resource plans to support those schedules, the Best-in-Class are also more active in consistently using performance data to re-evaluate and adjust their service plans. In terms of scheduling, 44% of the Best-in-Class leverage service performance results to evaluate the efficacy of leveraged scheduling criteria. Not satisfied with just making day-to-day improvements, the Best-in-Class are also active in measuring the accuracy of their service plans and forecasts:

- 37% of the Best-in-Class measure plan accuracy on at least monthly, as compared to 29% of all other organizations that do the same
- 54% of the Best-in-Class analyze plan accuracy at least quarterly as compared to 38% of Laggards

Once again, frequent assessment of plan accuracy allows the Best-in-Class to make necessary adjustments to ensure that their service plans are actually leading to desired utilization and response levels. In addition, the Best-in-Class are also turning their focus on using performance measurements to improve overall service employee management.

Table 12: Looking Inward

Measure Quarterly or More Frequently	Percentage of respondents	
	Best-in-Class	All Others
Employee Productivity	86%	72%
Employee Turnover	49%	32%
Employee Engagement	36%	24%
Employee Satisfaction	22%	19%

Source: Aberdeen Group, January 2011

As Table 12 reveals, it's not just the employee-specific metrics that are being measured by the Best-in-Class, but also the frequency of

“Regular communication and dialog with our field team is part of our normal business activity. This is facilitated by the fact that our team is fairly small, and our team’s offices are all in one hallway. The result is an enhanced level of trust and mutual respect, and a culture that promotes helping each other for the team’s overall success.”

~ Vice President of Technical Services,
Metal Equipment OEM

measurement that sets them apart. For instance, with regard to productivity, 86% of Best-in-Class organizations measure service employee productivity on a quarterly or more frequent basis. Thirty-one percent (31%) of the Best-in-Class measure productivity on weekly basis when compared to 19% of Laggards. Conversely, 28% of Laggards measure productivity on an annual or ad-hoc basis when compared to 4% of the Best-in-Class.

This focus on employee metrics isn't just limited to productivity. In fact, 36% of the top-performing companies are frequently looking at employee engagement when compared to 24% of all others. And tragically, 27% of Laggards indicate they have no visibility into employee engagement at all. With steps in place to keep an eye on engagement, Best-in-Class organizations aren't only taking action to improve employee alignment with the service vision, as seen in higher overall engagement scores (77% of employees engaged vs. 57% for Laggards), but are also working to leverage motivated and engaged employees to drive higher levels of productivity and customer satisfaction. (See Analyst Insight in Chapter One).

Best-in-Class organizations are also looking to motivate their engaged employees based on improved performance. While revealing similar percentages as all others in terms of productivity-based incentives, these organizations are beginning to take the lead in tying incentives to their service agents tied to customer feedback, revenue and profitability. With the increased focus on revenue, it is interesting to note the increasing interest from the Best-in-Class in tying incentives to closed leads that were originally recognized by service agents.

Table 13: Recognition and Reward

Service technician incentive tied to	Percentage of respondents	
	Best-in-Class	All Others
Service or organization profit	44%	36%
Customer feedback	36%	25%
Customer retention	33%	24%
Productivity	33%	41%
Closed leads	27%	24%
Recognized opportunities	18%	20%

Source: Aberdeen Group, January 2011

Technology and Knowledge Management

To support and enable improved scheduling, planning and workforce management processes, the Best-in-Class have made significant investments in automation. From a pure schedule creation perspective, these organizations are two times as likely as all others (22% vs. 11%) to use dynamic scheduling applications. With that said, these organizations are

more likely to use integrated solutions of which scheduling is a piece. For instance, 47% of the Best-in-Class leverage field service management applications that combine work order management, scheduling and mobile capabilities. Beyond that 36% of the Best-in-Class indicate using broader service management solutions that provide an integrated workforce management (scheduling + planning + mobile + work order management) experience.

Table 14: Enabling Field Excellence

Solution in Place	Percentage of respondents	
	Best-in-Class	All Others
Field service automation (scheduling + work order management + mobile)	47%	30%
Parts tracking solution	44%	24%
ERP with scheduling functionality	38%	28%
Service Management with scheduling/planning functionality	36%	19%
Stand-alone mobile field service application	36%	27%
Resource planning	33%	25%
Workforce management (HR-focused tied to payroll, tracking, vacation etc.)	33%	22%
Dynamic scheduling	22%	11%

Source: Aberdeen Group, January 2011

Mobility forms a central piece of the Best-in-Class drive for productivity. As seen earlier in the chapter, Best-in-Class technicians are two times as likely as Laggards to provide work order information to their technicians via a mobile application. Beyond the receipt of service tickets, Best-in-Class technicians are also enabled to complete the following task-specific workflows on a mobile device:

- Accept and close out work orders
- Complete timesheets
- Update current status
- Update customer on time of arrival
- Expense reporting
- Access parts availability

Aberdeen's [Mobile Field Service](#) (March 2010) research has revealed how Best-in-Class technicians are also empowered with field-based access to customer management capabilities to ensure an improved overall customer experience.

Beyond tools to aid in scheduling, the Best-in-Class are also leveraging resource planning applications to assist their service and functional leaders

“We are most interested in deploying an integrated field mobility solution fully integrated with our case management and dispatch scheduling tools. We believe that through advanced location-based scheduling and stat-using we can gain upwards of 20% incremental field workforce productivity.”

~ Brian Lucyk,
Vice President,
Central Operations,
Pendulum LLC

to develop accurate and effective resource plans to efficiently meet future service demand. As planning becomes more integral to the effective delivery of predictive and proactive service, Aberdeen expects continued interest in resource planning, performance management and decision support applications in the next 12 to 24 months. This was confirmed at Aberdeen's 2010 CSO Summit, wherein attendees indicated that analytics and performance management tools were the top desired technology investment for 2011.

Finally, Best-in-Class organizations are also increasingly leveraging HR-specific tools to track their service employees. Tools that allow for better visibility into employee schedules and calendars, enable time and expense tracking and reporting, while tracking employee training and certification profiles are also seeing significant traction.

Aberdeen Insights — Technology and Knowledge Sharing

For the Best-in-Class, the ability to create work orders and schedules isn't limited to service team members. These organizations are also looking to get their service network partners and customers involved in the schedule creation and management process. For network partners this is facilitated via portal-based access to enterprise scheduling solutions, a capability that 40% of the Best-in-Class are looking to have in place. More so, 44% of the Best-in-Class organizations claim that they are primarily responsible for scheduling third-party technicians, compared to 33% of all others.

Customers of Best-in-Class organizations are also afforded the ability to create service orders, order parts or view job status via specific customer portals. These portals are created to allow for increased self-service and self-scheduling opportunities, and to ensure that the well laid schedules and plans of the Best-in-Class aren't laid to waste by the absence of the eventual customer for a particular appointment.

Table 15: Extending the Enterprise

Via Portal, Customer has Ability to	Percentage of respondents	
	Best-in-Class	All Others
Create and receive SMS or Email alerts on work and technician status	47%	27%
Create service ticket	47%	37%
Order service parts	38%	30%
Reschedule technician visit	36%	26%
Update current status (at home, away)	27%	20%

Source: Aberdeen Group, January 2011

Chapter Three: Required Actions

Whether a company is trying to move its performance in field service delivery and workforce management from Laggard to Industry Average, or Industry Average to Best-in-Class, the following summarized actions structured around scheduling, planning and improved employee management, will help spur the necessary performance improvements:

Laggard Steps to Success

Laggards face a difficult task in terms of catching up with Industry Average and Best-in-Class organizations, particularly in workforce productivity and utilization (Table 6). These organizations are also struggling with tracking and driving overall employee engagement and therefore need to:

- **Strengthen planning capabilities.** Only 24% of Laggards indicate that preventive maintenance is a major reason for service dispatch, when compared to 32% of Industry Average organizations and 51% of the Best-in-Class. A major reason for this is that less than 40% of Laggards are actively engaged in forecasting and planning for future service demand. In contrast, service resource planning is a priority for 63% of Industry Average organizations. Laggards must take steps to develop plans for future service needs to introduce a level of predictability in their resource and dispatch needs.
- **Provide field workers with mobile tools for improved work order management.** Only 18% of Laggards leverage mobile field service applications that allow their field agents to access work orders or make schedule adjustments, when compared to 32% of Industry Average organizations. Instead, field workers at Laggard organizations have to rely on manual paper-based processes that are time consuming and error prone.
- **Drive employee management with increased performance insight.** Laggards are two times as likely (28% vs. 14%) as Industry Average organizations to measure employee productivity on an annual or ad-hoc basis. Conversely, Industry Average organizations are nearly two times as likely as Laggards (72% vs. 39%) to measure productivity on a weekly or monthly basis. Beyond productivity, Laggards also have very little visibility into metrics such as employee engagement and satisfaction. Starting with productivity, it is vital that these organizations develop greater visibility into employee-specific metrics so as to assess the true impact of automation and other field service improvement initiatives.
- **Provide more frequent on-the-job training for field workers.** Laggard organizations are active in providing their new hires with on-the-job training right at the time of hire, as indicated by 50% of Laggard respondents. However, it's a one and done effort as these organizations are less likely to continue to provide on-the-job training after the initial training period. Only 24% of Laggards encourage their employees to request additional on-the-job training

Fast Facts

- ✓ 51% of the Best-in-Class indicate dispatching technicians for preventive maintenance, compared to 24% of Laggards
- ✓ 64% of the Best-in-Class have a centralized scheduling model, compared to 53% of the Industry Average
- ✓ 40% of the Best-in-Class are evaluating the implementation of knowledge management solutions in the next 12 months

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

when compared to 38% of Industry Average organizations. More so Industry Average organizations are 18% (39% vs. 33% for Laggards) more likely to provide on-the-job training on monthly or quarterly cycles. More frequent on-the-job training allows for increased access to work-related best practices, therefore driving effective use of available tools to boost work order closure rates.

Industry Average Steps to Success

While the Industry Average are retaining greater than 80% of their customers, they are still driving sub optimal utilization levels and significantly lower success rates in meeting required response and completion times. Therefore these organizations should:

- **Centralize scheduling responsibility and oversight.** While 53% of Industry Average organizations leverage a centralized scheduling model, almost a third are still looking to do so in the next 12 months. Sixty-four percent (64%) of the Best-in-Class utilize a centralized oversight model which enables a comprehensive view of all work orders and service resources, thereby allowing the organization to make necessary adjustments and reallocations to meet required response or completion times.
- **Increase scheduling frequency.** Best-in-Class organizations are much more likely (40% vs. 25%) to be scheduling service tickets in real-time. In order to drive utilization and efficiency rates, Industry Average organizations should look to reduce the instances of weekly and monthly scheduling and move towards scheduling tasks more frequently.
- **Include SLA requirements in the scheduling mix.** Of the top criteria used to determine optimal schedules, only 28% of the Industry Average consider contractual requirements when compared to 40% of the Best-in-Class. Not only will this lead to significantly lower compliance rates but it also increases the organizational cost burden tied to penalties from non-compliance.
- **Equip field agents with tools to expedite work order closure.** Beyond the basic mobile work order management capabilities prescribed to Laggards, Industry Average organizations are actively evaluating printing and barcode scanning capabilities in the next 12 months. Forty-percent (40%) of Industry Average organizations are looking to equip their agents with barcode scanning capabilities which can expedite work order closure by allowing for immediate and accurate capture of leveraged parts, labor and materials per service visit. With the aid of printing capabilities, as desired by 36% of Industry Average organizations, technicians can produce proof-of-service receipts for customers to sign, thereby driving closure rate, reducing invoicing cycles and enhancing eventual time to cash.

Best-in-Class Steps to Success

The Best-in-Class must continue to drive efficiencies through expanding planning initiatives while making internal structural changes to boost revenue generation.

“Training is essential. At our firm it starts with rolling out a document we call a Process Definition Guide. This guide details for each client the communication process (if it varies from the standard), specific guidelines for site level work, and specific technology work instructions. The guide is reinforced during monthly meetings/conference calls with all involved (employees and service partners). The monthly communication process is essential to the consistency and reliability of the support process.”

~ Scott Goemmel,
Partner,
PMV Technologies

- **Continue to leverage performance data to tweak scheduling criteria.** Given the ever changing nature of service delivery and customer management, it is important that Best-in-Class organizations continue to tweak their scheduling algorithms. An optimal schedule based on current inputs may no longer remain optimal should customer requirement or service obligations change. While forty-four percent (44%) of the Best-in-Class are continuously evaluating and tweaking scheduling criteria, another 40% are looking to do so in the next 12 months.
- **Consider revenue-based incentives.** The Best-in-Class have indicated a shift in moving away from productivity-based incentives to those tied to profitability and positive customer feedback. In the hunt for enhanced revenue opportunities and improved collaboration, Best-in-Class organizations should also link service employee incentives to increased lead generation and lead closure. Twenty-seven percent (27%) of the Best-in-Class are looking to implement revenue-based incentives (tied to either lead recognition or lead closure) to their field agents in the next 12 months.
- **Capture and share service knowledge across the enterprise.** Aberdeen's [State of Service Management](#) research (September 2010) revealed how collaboration across the enterprise was key in improving customer service and in ensuring increased revenue opportunities. To that end, 56% of the Best-in-Class have prioritized the sharing of service information across the organization as a strategic action to drive field service performance. In support, 40% are evaluating the implementation of knowledge management solutions in the next 12 to 24 months. With the aid of better access to service knowledge and best practices, Best-in-Class field agents are able to improve their issue resolution rates, learn to identify revenue generating opportunities and improve their overall customer management skills.

“We want our field techs to take ownership of their territories and customers. We want to provide them with the right tools necessary to enable them to be the most productive and engaged employees possible.”

~ Executive,
Large North American
Telecommunications Company

Aberdeen Insights — Summary

Aberdeen's 2011 field service research has highlighted how the leaders at Best-in-Class service organizations are not only driving improved service delivery via more efficient execution at the point-of-service, but are also looking to inject more predictability in the business with improved and more frequent forecasting and planning. More so, service leaders are also taking a greater stake in ensuring that they are equipped with the right service workforce to meet the changing needs of the service organization. As such, leading service organizations are increasing their collaboration with HR and therefore taking a greater stake in hiring, training and compensation processes in order to ensure a more service-ready field workforce.

Appendix A: Research Methodology

Between December 2010 and January 2011, Aberdeen examined the experiences and intentions of 312 service and manufacturing enterprises in the management of field service operations and their field service workforces

Aberdeen supplemented this online survey effort with interviews with select survey respondents, gathering additional information on desired service workforce management and service delivery plans, strategies and prioritized investments.

Responding enterprises included the following:

- *Job title / function:* The research sample included respondents with the following job titles: C-Level executive (20%); Vice-President or Director (32%); Manager (31%); and other (17%).
- *Industry:* The following industries had the largest representation in the study: Industrial Equipment/Product Manufacturing (16%); Office and Computer Equipment (12%); Medical Devices and Services (10%); IT Services (10%); Telecom (9%); and other (43%).
- *Geography:* The majority of respondents (63%) were from North America. Remaining respondents were from the Asia-Pacific region (11%); from EMEA (24%); and other (2%).
- *Company size:* Nineteen percent (19%) of respondents were from large enterprises (annual revenues above US \$1 billion); 36% were from midsize enterprises (annual revenues between \$50 million and \$1 billion); and 45% of respondents were from small businesses (annual revenues of \$50 million or less).
- *Field Service Headcount:* Nine percent (9%) of respondents were from large service enterprises (field technician headcount greater than 500); 50% were from midsize service enterprises (field technician headcount between 50 and 500); and 41% of respondents were from small field service businesses (technician headcount less than 50).

Study Focus

Responding service executives completed online surveys that included questions designed to determine the following:

- √ Current and planned workforce management strategies
- √ The degree to which field service technology is deployed in their service operations and the financial implications of the technology
- √ The structure and effectiveness of existing automation implementations
- √ The benefits, if any, that have been derived from service organizational improvements and the impact of technology

The study aimed to identify emerging best practices in field service delivery and workforce management, and to provide a framework by which readers could assess their own capabilities.

Table 16: 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, January 2011

Table 17: 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, January 2011

Table 18: 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, January 2011

Appendix B: Related Aberdeen Research

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

- [Real-time Service Enterprise](#); November 2010
- [State of Service Management 2011](#); September 2010
- [Multi-Channel Service Delivery](#); June 2010
- [Employee Performance Management](#); May 2010
- [Mobility in Service: The Agenda for 2010](#); March 2010
- [Providing a 360 Degree View of the Customer](#); March 2010
- [The Chief Service Officer's Guide to Service Revenue](#); January 2010

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

Author(s): Strategic Service Management Research
Sumair Dutta, Senior Research Analyst, (sumair.dutta@aberdeen.com)
Aly Pinder, Jr., Research Associate (aly.pinder@aberdeen.com)

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.

As a Harte-Hanks Company, Aberdeen's research provides insight and analysis to the Harte-Hanks community of local, regional, national and international marketing executives. Combined, we help our customers leverage the power of insight to deliver innovative multichannel marketing programs that drive business-changing results. For additional information, visit Aberdeen <http://www.aberdeen.com> or call (617) 854-5200, or to learn more about Harte-Hanks, call (800) 456-9748 or go to <http://www.harte-hanks.com>.

This document is the result of primary research performed by Aberdeen Group. Aberdeen Group's methodologies provide for objective fact-based research and represent the best analysis available at the time of publication. Unless otherwise noted, the entire contents of this publication are copyrighted by Aberdeen Group, Inc. and may not be reproduced, distributed, archived, or transmitted in any form or by any means without prior written consent by Aberdeen Group, Inc. (2011a)

Featured Underwriters

This research report was made possible, in part, with the financial support of our underwriters. These individuals and organizations share Aberdeen's vision of bringing fact based research to corporations worldwide at little or no cost. Underwriters have no editorial or research rights, and the facts and analysis of this report remain an exclusive production and product of Aberdeen Group. Solution providers recognized as underwriters were solicited after the fact and had no substantive influence on the direction of this report. Their sponsorship has made it possible for Aberdeen Group to make these findings available to readers at no charge.



Astea International (NASDAQ: ATEA) is a global provider of service management software solutions that address the unique needs of companies who manage capital equipment, mission critical assets and human resources. Astea's solutions provide all the cornerstones of service lifecycle management, including customer management, service management, asset management, reverse logistics management and mobile workforce management. Astea Alliance and FieldCentrix empower your team by making actionable data readily accessible, providing the agility you need to achieve sustainable value in less time, and successfully compete in a global economy. In order to deliver best-in-class service, you need seamless continuity and visibility of every interaction with the customer. You can manage the entire service lifecycle with a single provider — Astea.

For additional information on Astea International Inc.:

Astea International Inc.

240 Gibraltar Road

Horsham, PA 19044-2306

USA

www.astea.com

dgeiger@astea.com



ClickSoftware is the leading provider of automated workforce management and optimization solutions for every size of service business. Our portfolio of solutions, available on demand and on premises, create business value through higher levels of productivity, customer satisfaction and operational efficiency. Our patented concept of 'continuous planning and scheduling' incorporates customer demand forecasting, long and short term capacity planning, shift planning, real-time scheduling, mobility and location-based services, as well as on-going communication with the consumer on the expected arrival time of the service resource.

For additional information on ClickSoftware:

35 Corporate Drive Suite 400

Burlington, MA 01803

Telephone: 888.438.3308

www.clicksoftware.com

info@clicksoftware.com



Metrix's comprehensive service management and mobile field service management software will allow you to accelerate service delivery, reduce inventory costs, increase contract revenues, maximize warranty recovery, and decrease repair times. In short, Metrix enables your company to provide world-class customer service, increasing overall company profitability.

Built by people who know field service, Metrix is flexible, integrates easily and deploys rapidly, all of which contribute to its low total cost of ownership and high return on investment.

For additional information on Metrix:

Metrix

20975 Swenson Dr.

Milwaukee, WI 53186

Telephone 1: 800.543.2130

Telephone 2: 262.717.6539

www.metrix.com

MJacobson@metrix.com



ServiceMax delivers the future of field service, today. The only complete suite of cloud-based, collaborative and mobile field service applications, ServiceMax gives companies unprecedented capabilities to drive growth, efficiency and customer delight. ServiceMax optimizes everything from contract entitlements to scheduling & workforce optimization, to inventory & parts logistics and real-time customer and partner portal access. ServiceMax is a pure cloud application so customers are up and running quickly with a low cost subscription model that is completely integrated with their CRM. Customers include large enterprises like DuPont, Electrolux, and Pentair, and smaller companies such as Everyday Wireless and Advanta Clean.

For additional information on ServiceMax Inc.:

ServiceMax, Inc.

2560 Mission College Blvd., Suite 103

Santa Clara, CA 95054

Telephone: 408.748.6970

www.servicemax.com

stacey.epstein@servicemax.com

SERVICE*Power*
Service Made Simple

ServicePower provides software and services designed to optimize field service business. These products and services support mobile field organizations comprising any or all of full time employees, contractors, and networks of third parties. ServicePower capabilities include:

- Real-time workforce management, planning, and analytics
- Schedule and route optimization
- Wireless dispatch, status update and GPS based location tracking
- Third party service network management and recruitment
- Warranty claims processing

We deliver this capability through a combination of software products and hosted managed services.

For additional information on ServicePower:

ServicePower

222 Severn Avenue, Suite 31, Building 4-D

Annapolis, Maryland, MD 21403

Telephone: 410.571.6333

www.servicepower.com

M.Homer@servicepower.com



SINGLE SOURCE
S Y S T E M S . I N C .

Single Source Systems, Inc. develops, sells and supports service management software solutions for small to mid-sized companies that manufacture, install and service complex products or high value assets. Service Management-Plus (SM-Plus), the company's flagship product, helps organizations increase efficiencies, productivity, use of resources, customer loyalty and profit opportunities by streamlining the entire service operation. Single Source, founded in 1985, now has over 600 customers worldwide and is considered by many to be one of the foremost experts in the service management industry.

For additional information on Single Source Systems, Inc.:

Single Source Systems, Inc.

9003 Technology Lane

Fishers, IN 46038

Telephone: 317.596.3000

Fax: 317.596.3001

www.singlesrc.com

marrho@singlesrc.com