Field Service 2013
Workforce Management Guide

February 2013
Sumair Dutta
Executive Summary

Field service excellence is determined not only by the effectiveness and efficiency of the service visit, but also by the experience felt by the final customer. While technology plays a central role in enhancing operational efficiencies in the field, it is the personal characteristics and capabilities of the field service workforce that determine the final experience. As a result, service organizations are tasked with developing, allocating, and empowering the right field service workforce to effectively meet and exceed customer service needs.

Best-in-Class Performance

In December 2012 and January 2013, Aberdeen Group surveyed 156 service professionals. Those defined as Best-in-Class exhibited the following traits:

• 89% first-time fix rate (71% for All Others)
• 78% workforce utilization rate (64% for All Others) and a 11.4% increase in workforce productivity over the previous 12 months
• 92% compliance with stated response times (72% for All Others)

Competitive Maturity Assessment

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

• Twenty-five percent (25%) more likely (64% vs. 51%) than All Others to dynamically create service schedules as work orders are created
• Twenty-four percent (24%) more likely (61% vs. 49%) to have service leadership in charge of forecasting and resource planning
• Thirty-three percent (33%) more likely (61% vs. 46%) to have incoming service requests go through a triage and diagnosis process prior to dispatch
• Greater than 35% more likely to automate workforce management capabilities such as time and attendance, payroll and benefits

Required Actions

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

• Integrate parts into scheduling criteria
• Schedule service tasks more frequently and in a centralized manner
• Empower field agents with mobile tools and devices and real-time access to information
• Develop dynamic service resource plans
• Use performance management tools to tweak resource plans, schedule parameters, and workforce management processes
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Chapter One:
Benchmarking the Best-in-Class

Effectiveness, Efficiency, and Experience

In the battle to meet, deliver on, and potentially exceed customer expectations when it comes to service, field-based work and field service play a vital role. In Aberdeen's State of Service Management: Outlook for 2013 (January 2013), 45% of respondents indicated that field service was an integral area of investment in 2013. This is vital, as a great deal of service work ultimately ends up in the hands of field technicians or engineers. This is borne out by a new survey of 156 organizations around field service workforce management, where respondents reported that 57% of incoming service calls required a field visit for issue identification and resolution.

When discussing field service performance, it is important to consider the effectiveness of service delivery as well as the experience delivered to the customer. First-time fix, for example, is a good measure of field service effectiveness wherein a customer’s issue is resolved on a first-visit basis. However, a customer might still be dissatisfied with the overall experience if it took a very long time to receive a service appointment, or the field agents were tardy, or billing tied to an appointment was improperly handled. These two factors of effectiveness and experience can become even more vital when considering the impact of the service work on the customers’ customers as in the case of an improperly serviced MRI machine or power generator. On both fronts, there is room for improvement as seen in Figure 1 which highlights the primary reasons for complaints with field service work. Of most importance is the effectiveness factor as reported by 57% of organizations. With organizations reporting a 75% first-time fix performance, this opens the door for a significant amount of complaining.

Figure 1: Field Service Complaints

- Technician did not resolve issue: 57%
- Wait to receive appointment time: 37%
- Technician did not arrive on time: 25%

Top FS Complaints, Percentage of Respondents, n=156

Note: Top Three Answers Requested; Source: Aberdeen Group, January 2013
Organizations also report a similar 76% performance in on-time compliance, therefore indicating that even when an appointment is set or arrival time determined by contract, organizations fail to meet those times nearly 25% of the time. All of this results in dissatisfied customers, lost customers, and those who begin to seek alternative providers of service in a market where there is no shortage of competitors (Figure 2). The loss of customers, or the additional cost associated with regaining or winning back disgruntled customers, then has a direct impact on the profitability of the overall service business, wiping out any efficiency gains seen from improved operational investments.

Figure 2: A Competitive Field Service Market

![Top Market Pressures, Percentage of Respondents, n=156](image)

Note: Top Three Answers Requested; Source: Aberdeen Group, January 2013

As a result we are faced with a situation where organizations are not only challenged to push ahead in terms of customer satisfaction, retention, and profitability performance, but also struggle to meet goals established just 12 months earlier.

Table 1: Not a Sustainable Business Model

<table>
<thead>
<tr>
<th>Goals</th>
<th>Percentage of respondents who Met 2012 Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>58%</td>
</tr>
<tr>
<td>Customer Retention</td>
<td>57%</td>
</tr>
<tr>
<td>Service Profitability</td>
<td>51%</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, January 2013

"Customers buy on relationships, if they trust company "XYZ" they will more likely purchase from that company. Field service helps build that trust and loyalty with the customer."

~ Support Supervisor, North American Equipment Manufacturer
Improving in 2013

Therefore, it is no surprise that field organizations are looking to improve their customer service performance in 2013 (Figure 3). With the aid of better customer satisfaction and customer retention, these organizations also hope to open the door to discussions around newer products and services, therefore increasing the potential for higher revenue streams. Aberdeen’s *State of Service: Outlook for 2013* (January 2013) highlighted how 80% of revenue is driven from current customers on existing products or new products and services. As a result, improved field service performance is seen as a direct means to improving revenue fortunes.

Figure 3: Goals for the Next 12 Months

![Graph showing goals for the next 12 months](image)

Note: Top Three Answers Requested; Source: Aberdeen Group, January 2013

Improved efficiency and productivity continues to be a top goal for field organizations in 2013, as it was in 2012. It is vital that these organizations not only look at the total number of jobs attended per day per technician, but also look at the utilization of their service technicians, i.e. the amount of time spent on work as opposed to transit or idle time. By hiring a large number of technicians, an organization might be able to drive three to four jobs a day per technician, but due to higher resource levels these technicians may be idle for half of their days. This isn’t ideal, especially for the servicing organization, due to increased cost associated with inefficient resource levels. In addition, more time spent in front of customers allows technicians to truly understand customer issues, identify potential solutions, and discuss products and services that might enhance customer value while increasing organization revenue.
The Maturity Class Framework

Goals are good, but execution towards these goals is vital to ensuring success in 2013. As seen in Table 1, the best laid plans for field service organizations haven’t always yielded the desired results. Best-in-Class organizations have experienced greater success in meeting key business goals set for 2012 (Table 2).

Table 2: Hitting the Mark

<table>
<thead>
<tr>
<th>Goals</th>
<th>Percentage of respondents who Met 2012 Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Best-in-Class</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>75%</td>
</tr>
<tr>
<td>Productivity</td>
<td>71%</td>
</tr>
<tr>
<td>Cost</td>
<td>68%</td>
</tr>
<tr>
<td>Service Profitability</td>
<td>64%</td>
</tr>
<tr>
<td>Revenue</td>
<td>57%</td>
</tr>
<tr>
<td>Field Service Employee Turnover</td>
<td>54%</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, January 2013

Before discussing the steps leading service organizations take to boost service performance, it is essential to develop a valid, metrics-based framework that defines the Best-in-Class. This definition is based on metrics that reveal excellence in the organization and efficiency of the service workforce, leading to advantages in customer-facing and financial metrics (Table 3).

Table 3: Top Performers Earn Best-in-Class Status

<table>
<thead>
<tr>
<th>Definition of Maturity Class</th>
<th>Mean Class Performance</th>
</tr>
</thead>
</table>
| **Best-in-Class: Top 20% of aggregate performance scorers** | ▪ 92% Success rate in meeting response times  
▪ 78% Workforce Utilization  
▪ 89% First-Time Fix  
▪ 11.4% Increase in Productivity over the previous 12 months |
| **Industry Average: Middle 50% of aggregate performance scorers** | ▪ 79% Success rate in meeting response times  
▪ 70% Workforce Utilization  
▪ 78% First-Time Fix  
▪ 5.8% Increase in Productivity over the previous 12 months |

Analyst Insight

These Metrics were not included in the determination of Best-in-Class, but highlight improved performance:

- **Scheduling Accuracy**
  - Best-in-Class — 81%
  - All Others — 72%

- **Overtime**
  - Best-in-Class — 8.4%
  - All Others — 17.8%
Definition of Maturity Class | Mean Class Performance
---|---
**Laggard:**
Bottom 30% of aggregate performance scorers | • 56% Success rate in meeting response times
• 53% Workforce Utilization
• 56% First-Time Fix
• 0.4% Increase in Productivity over the previous 12 months

Source: Aberdeen Group, January 2013

As service success, at the strategic level, is measured in terms of customer satisfaction, retention and profitability (metrics not used to determine Best-in-Class), it should be noted that the Best-in-Class organizations captured in Aberdeen’s survey outperformed all others in customer retention (90% compared to 80% for all other organizations). Financially, leading organizations experienced a 9.6% year-over-year increase in service revenue, ahead of the 6.6% increase driven by all other organizations. They accomplished this without sacrificing cost discipline: leading organizations kept service costs stable year-over-year, while costs increased 2.5% year-over-year for all other organizations.

**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 4).

**Table 4: The Best-in-Class PACE Framework**

<table>
<thead>
<tr>
<th>Pressures</th>
<th>Actions</th>
<th>Capabilities</th>
<th>Enablers</th>
</tr>
</thead>
</table>
| • Increasing competition and lower customer spending | • Invest in mobile tools to increase technician access to information in the field | • Incoming calls go through triage to improve issue identification | • Workforce Management Areas that are Automated:
  o Time and Attendance
  o Payroll
  o Work Order Management
  o Dispatch
  o Asset Tracking
  o Scheduling |
| | • Share service information across the organization | • Tasks scheduled as soon as work order is created | |
| | | • Service leadership responsible for developing demand forecasts and resource plans | |
| | | • Performance data used to evaluate scheduling criteria | |
**Best-in-Class Strategies**

The actions that Best-in-Class organizations prioritize to improve field service performance can be allocated in two buckets: planning and execution. In most instances the relationship between the two is linear, wherein planning comes first, followed by execution towards plan. In the case of the Best-in-Class, the area of differentiation can be a circular relationship between planning and execution. Plans are built to enable improved execution, and results from the execution and then fed back into more intelligent planning. Therefore, for the Best-in-Class, performance management plays a central role in enabling better plans and the strategies required to execute on those plans (Figure 4). Performance management is a key area of investment for the Best-in-Class in 2013 with the aim of enhancing workforce allocation (forecasting and scheduling) and workforce management (hiring, training, and retention) procedures.

![Figure 4: The Investment Action Plan](image)

With the aid of performance management, the Best-in-Class Strategic Action list can be summarized as (Table 5):

**Plan first** — Fifty-four percent (54%) of leading organizations are looking to get a better grip on future service demand and thereby allocate the necessary resources to meet this demand in an efficient and expedited manner.

**Execute** — With the aid of well allocated service resources (people, parts, and vehicles), leading organizations are looking to develop standardized scheduling processes to ensure that the best technician is available for the task at hand. In addition, these organizations look to ensure that these technicians have access to the information necessary to effectively complete service visits while delivering the optimal experience to customers.

“To improve field service performance we are looking to improve access to training and technical data in the field so the team members are better prepared for the call.”

~ Vice President, US Service, Medical Device Organization
Table 5: Strategic Actions

<table>
<thead>
<tr>
<th>Strategic Actions</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invest in mobile tools to provide technicians with better access to information in the field</td>
<td>57%  57%</td>
</tr>
<tr>
<td>Make captured service information available across the enterprise</td>
<td>54%  40%</td>
</tr>
<tr>
<td>Improve forecasting of and planning for future service demand</td>
<td>54%  39%</td>
</tr>
<tr>
<td>Develop standardized scheduling processes</td>
<td>46%  50%</td>
</tr>
<tr>
<td>Leverage performance data to determine optimal selection, training, and compensation practices</td>
<td>39%  17%</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, January 2013

Re-Evaluate the Plan — With the aid of performance data tied to productivity, utilization, first-time fix, and customer satisfaction levels, leading organizations tweak their action plans around the development of the optimal service workforce. This includes the use of data to rework hiring and training strategies, as well as the use of performance results to tweak demand forecasts and scheduling criteria.

When we look at Table 5, it is evident that all other organizations are still working on their execution plans and are left behind in the planning stages, which are so vital to the Best-in-Class.
Aberdeen Insights — Strategic Focus on Workforce Management

As seen in Table 5, the definition of workforce management for the Best-in-Class, or the determination of the right workforce for service tasks goes beyond just the determination of the right criteria to select the best technician for a specific job on a day-to-day basis. Before day-to-day execution, these organizations are focused on areas such as hiring, training and assessments, functions that have traditionally been viewed as HR-centric responsibilities (Figure 5). Leading organizations understand the ramifications of an under qualified, insufficiently trained, and disengaged service force and make sure that they collaborate with HR to truly put the best workforce out there in order to solve customer issues.

Figure 5: The Workforce Management Agenda

<table>
<thead>
<tr>
<th>Workforce Management Areas of Focus in 2013, Percentage of Best-in-Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce Planning</td>
</tr>
<tr>
<td>Training</td>
</tr>
<tr>
<td>Task Scheduling</td>
</tr>
<tr>
<td>Routing</td>
</tr>
<tr>
<td>Assessments</td>
</tr>
<tr>
<td>Third-Party Management</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, January 2013

"An investment for internal training is very much needed. This would be focusing around developing the soft skills for field service to better position the company in eyes of the customer, to be able to communicate with the customer in a manner of developing and growing the relationship with the customer. The other investment is in training programs for customers. Customers are looking to become more efficient in their operation / maintenance of equipment. Customers are looking to develop their own skill levels and are willing to pay for this service."

~ Support Supervisor, North American Equipment Manufacturer
Chapter Two: Benchmarking Requirements for Success

Successful service delivery depends on a supporting cast of organizational capabilities and processes that align with the strategies outlined in Chapter 1. Identifying these vital capabilities, specifically around scheduling frequency, planning discipline, knowledge sharing, and performance management, and the organizational gaps that must be overcome to put these capabilities in place, will help service firms ascend to Best-in-Class status.

Competitive Assessment

Best-in-Class service firms, as determined by their performance in key indicators, exhibit several of the capabilities highlighted in Table 6 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 or measure performance, and to make service delivery and employee management process changes with the aid of enhanced performance information).

Table 6: The Competitive Framework

<table>
<thead>
<tr>
<th>Category</th>
<th>Best-in-Class</th>
<th>Average</th>
<th>Laggards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scheduling – service tasks scheduled as the work order is created:</td>
<td>64%</td>
<td>56%</td>
<td>43%</td>
</tr>
<tr>
<td>Percentage of incoming calls that go through triage:</td>
<td>61%</td>
<td>49%</td>
<td>39%</td>
</tr>
<tr>
<td>Grouping of multiple preventive tasks if technician is scheduled onsite:</td>
<td>46%</td>
<td>21%</td>
<td>14%</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service leadership responsible for forecasting service demand and developing resource plans:</td>
<td>61%</td>
<td>59%</td>
<td>30%</td>
</tr>
<tr>
<td>Centralized scheduling of service resources:</td>
<td>61%</td>
<td>50%</td>
<td>49%</td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tag location system integrated with POS events in a business intelligence system:</td>
<td>8%</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automated Field Service Processes:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fast Facts

√ Organizations that route all calls through triage experience an 86% level of first-time fix when compared to a 62% level for those who have no triage at all.

√ 64% of the Best-in-Class develop work schedules on a real-time or fully optimized basis when compared to 51% of all other organizations.

√ Best-in-Class organizations are two times as likely as Laggards (61% vs. 30%) to provide service leadership with the responsibility to develop demand forecasts and build service resource plans.

√ 49% of organizations will increase their field service automation budgets in 2013, compared to 2012.
### Best-in-Class

- 68% Time and Attendance
- 68% Payroll
- 46% work order management
- 46% Dispatch
- 46% Asset Tracking
- 39% Task Scheduling

### Average

- 48% Time and Attendance
- 55% Payroll
- 39% work order management
- 41% Dispatch
- 33% Asset Tracking
- 29% Task Scheduling

### Laggards

- 32% Time and Attendance
- 41% Payroll
- 27% work order management
- 30% Dispatch
- 14% Asset Tracking
- 27% Task Scheduling

### Performance

Service performance data used to consistently evaluate scheduling criteria:

<table>
<thead>
<tr>
<th></th>
<th>Best-in-Class</th>
<th>Average</th>
<th>Laggards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>68%</td>
<td>48%</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>68%</td>
<td>55%</td>
<td>41%</td>
</tr>
<tr>
<td></td>
<td>46%</td>
<td>39%</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>46% Dispatch</td>
<td>41%</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>46% Asset Tracking</td>
<td>33%</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>39% Task Scheduling</td>
<td>29%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, January 2013

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### Capabilities and Enablers

The Competitive Framework (Table 6) shows that Best-in-Class performance isn’t predicated on excellence in any one support category. Rather, Best-in-Class organizations adopt a range of support structures to accomplish their planned strategies. In the case of field service, these capabilities help improve the alignment of field resources to the service organization’s vision.

**Process**

When it comes to scheduling, the Best-in-Class subscribe to the creed that it is vital to resolve issues on a first-visit basis, thereby reducing the need for costly secondary visits and improving customer satisfaction (Figure 1). As a result, these organizations actively invest in better diagnosis and triage during the initial service request. When a service call comes in, these organizations evaluate the available data to check if the call can be resolved over the phone or via self-service. If not, then a proper diagnosis at the time of the call can ensure that the issue and the solution requirements are properly logged prior to technician scheduling and dispatch.

Best-in-Class organizations indicate that 61% of incoming calls are routed through a triage phase, compared to only 50% for all other organizations. Better triage and diagnosis at the initial call level is seen as the primary means to improve first-time fix rates (Figure 6). Triage doesn’t guarantee first-time fix, but organizations that route all calls through triage experience an 86% level of first-time fix when compared to 62% for those who have no triage at all.

“*If the service is bad, all aspects of the customer interaction is tainted (this also is true for non-service related issues). With good service there are opportunities to grow the business in all areas.*”

~ Vice President, US Service, Medical Device Organization
Figure 6: Fixing First-Time Fix

Also important to raising first-time fix rates and workforce utilization is the effective scheduling of field technicians to meet customer commitments, SLA requirements, and overall completion goals. For optimal results, technician schedules need to be determined by taking factors such as availability, qualifications, SLA requirements, parts availability, and more into account. More so, schedules that are developed more frequently can accurately reflect real-time conditions as opposed to those that are developed once a week or once a month. Sixty-four percent (64%) of the Best-in-Class develop work schedules on a real-time or fully optimized basis when compared to 51% of all other organizations. In addition, leading organizations also do a better job of grouping multiple tasks when an agent visits a particular customer site. While the technician might be on site to resolve a certain break / fix issue, Best-in-Class organizations are more than two times as likely as All Others (46% vs. 18%) to group in other preventive tasks that the technician can attend to while on the customer site. This leads to greater workforce utilization as multiple trips are condensed into one, reduces the potential for future product failure via preventive maintenance, and increases customer satisfaction.

Organization
As seen in Figure 5 (Investment areas for 2013), leading organizations continue to invest in leadership to support better field service performance. For these organizations, it isn’t just about having a service leader in place, it’s about providing the service leader with the responsibility and accountability for service performance. Best-in-Class organizations are two times as likely as Laggards (61% vs. 30%) to provide service leadership with the responsibility to develop demand forecasts and build service resource plans. With the aid of these plans, these organizations can mobilize the

"There are 2 primary ways to improve first-time fix:
1. Accurately diagnose the problem and solution before going on site.
2. Bring enough parts to solve the most problems on one visit."

~ Andy Huber, Manager of Systems Strategy, Xerox Technical Services

Analyst Insight
Top Scheduling Criteria Used (Percentage of Respondents)
√ Current availability, 82%
√ Technician skills and qualifications, 79%
√ Travel time, 70%
√ Technician capacity, 51%
√ Nature / priority of service work, 50%
√ Customer importance, 49%
√ Customer availability, 45%
√ SLA Requirements, 41%
√ Parts available, 27%
√ Warranty, 21%
appropriate resources in order to face a spike in demand or to meet seasonal cycles and therefore see higher levels of utilization along with lower amounts of overtime (Table 7).

Table 7: Leaders for the Best

<table>
<thead>
<tr>
<th>Metric</th>
<th>Service Leadership Accountability for Demand Forecasts and Resource Plans</th>
<th>No Service Leadership Link to Forecasting and Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce Utilization</td>
<td>70%</td>
<td>64%</td>
</tr>
<tr>
<td>Response Time Compliance</td>
<td>81%</td>
<td>71%</td>
</tr>
<tr>
<td>Overtime</td>
<td>13%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, January 2013

Another area where service leadership is involved is in the centralization of scheduling across all service resources on a national scale. Sixty-one percent (61%) of the Best-in-Class follow a centralized model with regional adjustments compared with 50% of all other organizations. A centralized model allows for a more comprehensive view of utilization and allows for accountability of all resources. Regional scheduling models often lead to pockets of over-utilized or underutilized assets.

**Knowledge Management**

Field service performance can be greatly enhanced via collaboration. This could occur in the form of tighter integration with other service functions such as parts management or technical content, or with other business functions such as sales, design, and manufacturing.

**People and Parts** — The top reason for secondary visits is that the technician didn’t have the appropriate parts in hand to solve the customer issue (Figure 7).
Aberdeen's field service research shows that more than 50% of all field service visits ultimately require a service part. For those visits that do require a service part, the Best-in-Class report that the necessary parts are available in the technician’s truck 58% of the time. For all other organizations, in-truck part availability drops to 45%. The reason for this isn’t that technicians at Best-in-Class organizations have bigger trucks with larger part inventories, it is that these organizations have considered part availability a vital input in the triage, diagnosis, and scheduling stages in order to push service performance. Unavailability of parts can have severe customer service and profitability consequences. Due to a lack of resolution, the customer is likely to be dissatisfied with the service visit. Worse yet, the customer could lose valuable clients of their own leading to significant revenue loss. For the servicing organization, improper resolution not only means an added truck roll to service the customer, but also additional part shipments, and costly in-truck inventory that serves no use. Not only does this raise the cost of inventory, it also makes it more difficult to track all available parts as well as marginalizes efforts to appropriate forecast future part ordering and stocking levels.

**Service and Sales** — The goal of increase revenue for field service cannot be accomplished by forcing service agents to sell. Field service agents can quite often be viewed as trusted advisors who can recommend solutions to customers, but directly pushing them to sell can turn into a disaster. If organizations want a more sales-oriented service force, then the sales capability needs to be addressed in the hiring and training stages.

For those looking to improve revenue with their existing service teams the key is a tight link between service and account representatives around customer activity and information. A service visit can yield valuable nuggets for an account representative to engage in a conversation with the customer.

"To improve collaboration with sales, we must keep sales updated as to what issues service is seeing so they don't oversell units' features, creating hard feelings with customers."

~ Kirby Hills, President, At-Your Service Appliance Repair, Inc.
customer. As opposed to a cold call or cold visit, an informed account representative can understand customer pain points highlighted via service history and use those pain points to provide an adequate solution to the customer. In the interim, service agents should be provided monetary incentives to recognize, record, and communicate sales opportunities with their sales counterparts.

Fifty-four percent (54%) of the Best-in-Class, compared to 40% of All Others, have a system in place for service and sales to communicate around customer issues in order to improve overall account management.

**Performance Management**

As seen in the Best-in-Class Strategies section of Chapter 1, performance management plays a central role in the Best-in-Class drive for improved field service performance. Best-in-Class organizations actively use performance data to:

- Adjust forecasting procedures and resource plans
- Modify scheduling criteria to improve day-to-day execution (57% vs. 45% for All Others)
- Change workforce management policies, specifically around hiring, training, and outsourcing. (39% vs. 17% for All Others)

Performance data allows leading organizations to strengthen the plan-to-execute loop by using data to enhance their capabilities to support real-time field service needs.

**Technology**

Performance data can also be used by service leaders to build a case for automation that is required to support business needs. Automation plays a central role in boosting efficiency but can also play a vital role in improving workforce engagement and motivation. In Aberdeen's *State of Service Management: Forecast for 2012* research (January 2012) organizations indicated that the top strategies for boosting service workforce engagement revolved around:

- Automation of manual processes such as time and attendance, vacation, benefits
- Increased self-service options for workers to manage their schedules, vacations, benefits etc.

The Best-in-Class have invested significantly in automating various aspects of the field service workforce management spectrum, as seen in Table 8. However, it should be noted that the Best-in-Class automation roadmap also significantly relies on improved integration between field service automation systems and back-office systems such as:

ERP — for better billing, financial record keeping, and project management

CRM — for better customer records and collaboration

"We are currently investing in new software, computers, and laptops for the technicians to improve our field service performance. We are also investing in new smaller, more fuel efficient vehicles, and restructuring our inventory on each truck to try to make better use of our inventory investments."

~ Kirby Hills, President, At-Your Service Appliance Repair, Inc.
Parts Management — for improved parts inventories and scheduling

HR Systems — for improved workforce management

Table 8: Automation Trends

<table>
<thead>
<tr>
<th>Workforce Management Components</th>
<th>Currently Automated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Best-in-Class</td>
</tr>
<tr>
<td>Time and Attendance</td>
<td>68%</td>
</tr>
<tr>
<td>Payroll</td>
<td>68%</td>
</tr>
<tr>
<td>Task or Shift Scheduling</td>
<td>57%</td>
</tr>
<tr>
<td>Benefits</td>
<td>46%</td>
</tr>
<tr>
<td>Work Order Management</td>
<td>46%</td>
</tr>
<tr>
<td>Dispatch</td>
<td>46%</td>
</tr>
<tr>
<td>Asset Tracking</td>
<td>46%</td>
</tr>
<tr>
<td>Third-Party Management</td>
<td>32%</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, January 2013

**Analyst Insight**

49% of organizations will increase their field service automation budgets in 2013, compared to 2012. 32% will keep budgets constant.
The planning and execution aspects of field service workforce management will receive the most attention from an automation point-of-view in the next 12 months, as seen in Figure 8. Not reflected in the chart is the continued interest in mobile solutions, as indicated in Table 5 where 57% of respondents are evaluating continued investment in mobility to enhance field service performance.

Figure 8: Field Service Automation Investments for 2013

In 2013, we will also see a greater interest in cloud-based deployments of field service tools, with 34% of organizations indicating that cloud computing will impact their field service automation roadmaps in 2013. This is due to the cost, initial investment, scalability, and time to deployment benefits seen from cloud-based solutions. The interest in the cloud for field service is up slightly from 2012 when less than 30% of organizations indicated an interest in cloud-based deployments for field service.
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**

- **Automate Work Order Management.** Laggards who automate work order management are more efficient and perform better in response times (62% vs. 56%), utilization (54% vs. 52%), and first-time fix (59% vs. 56%) versus those who don’t. Only 27% of Laggards automate work order management compared to 39% of Industry Average organizations. Moving away from paper-based records is the first step to improving efficiency in field service and allows for better scheduling and planning.

- **Add Focus on Planning.** Only 30% of Laggards have their service leaders developing service resource plans based on demand forecasts, compared to 59% of Industry Average organizations. The best-laid schedules can be greatly enhanced with better resource allocation strategies, especially when dealing with sudden spikes or peaks in service demand.

- **Improve Frequency of Scheduling.** Twenty-five percent (25%) of Laggards develop work schedules for their technicians once every two days or less frequently, compared to 13% of Industry Average organizations. Faster and more dynamic scheduling is necessary to improve responsiveness to customer needs and market conditions while maximizing technician productivity.

- **Integrate Mobile with the Back-Office.** Nearly 50% of Laggards are looking to invest in mobile tools to improve their field service performance. The true return of mobile investments can only be felt if mobile devices and applications provide field workers with the information needed to complete their tasks efficiently. As such, these Laggard organizations need to ensure that their mobile investments are anchored with investments in integration between the field and back-office.

**Industry Average Steps to Success**

- **Triage and Diagnose before Dispatching.** As seen in Figure 6, improved diagnosis and triage processes at the time of the initial service call is the most sought-after means to improve first-time fix. Yet, only 50% of calls go through a triage process at Industry Average organizations, compared to 61% for the Best-in-Class.
Raising this triage percentage to 60% can lead to significant changes to first-time fix. Those Industry Average organizations at 60% triage level or better resolve issues on a first-visit 83% of the time compared to a 76% first-time fix performance for All Others.

- **Increase Preventive Focus of Field Service Organization.** For Industry Average organizations, only 28% of service visits are for preventive reasons, which means we can infer that most field visits are break-fix in nature. While this proportion is similar to the Best-in-Class, it needs to be improved in order to enhance customer satisfaction levels. An area where the Best-in-Class are ahead of their Industry Average counterparts is in scheduling and grouping preventive visits when a technician is on a customer site for break-fix work. The Best-in-Class are more than two times as likely (46% vs. 21%) as the Industry Average to add-on preventive service tasks during a routine break fix visit.

- **Improve Integration with Third-Parties.** Forty percent (40%) of the Industry Average with scheduling automation in place oversee and manage the scheduling of third-party workers, compared to 58% of the Best-in-Class. Seeing that more than 20% of service visits are managed by third-party workers (contracted or non-contracted), a centralized scheduling plan that takes third parties into account can be vital in improving field service performance.

- **No Part, No Visit.** Of visits that require a service part, only 47% of the time is that part available in the technician’s truck stock, compared to 58% of the time for the Best-in-Class. Customer frustration, increased cost, and additional drive times are all adverse outcomes of this situation. There are three primary solutions for this issue:
  - Improve diagnosis at initial call to understand what part is needed for the service visit or visits.
  - Incorporate part availability or access in schedule development.
  - If technicians don’t have the necessary parts in their truck stock, provide them the tools to search for and acquire the necessary parts from other technicians or stocking depots.

- **Make Life Easier for Field Service Technicians.** The more time that field technicians can spend on actual work the better. This not only involves daily paperwork for field service tasks, but also the paperwork or time taken to complete schedules, log time and attendance, review payroll, change benefits, file for vacation etc. The easier it is for technicians to monitor, edit, and manage their workforce benefits, the more engaged they will be in their day-to-day service work. As seen in Table 8, the Best-in-Class have been very diligent in automating these functions.
Best-in-Class Steps to Success

- **Understand the Cost of Idle Time.** The discussion of workforce utilization quite often centers around minimizing overtime. Overtime can be costly but can sometimes be a necessary expense. Continuous overtime can signal a systemic resource issue and needs to be addressed. But the cost of occasional overtime needs to be balanced against the cost of idle time. While the Best-in-Class have the highest levels of utilization (78% vs. 64% for All Others) and lowest amounts of overtime (8.4% vs. 17.7% All Others), very few of these organizations use idle time as an input in their scheduling algorithms.

- **Benchmark Performance against the Industry.** One half of Best-in-Class organizations aren’t aware of the industry standards or averages when it comes to appointment windows and times. In the battle for customer loyalty in a competitive market, the service experience is becoming nearly as important as the effectiveness of service. Industry benchmarks are a great way to gauge your organization’s competitiveness with regards to a service offering.

- **Increase Focus on Training.** Forty-three percent (43%) of Best-in-Class organizations agree that improved and sometimes increased training is necessary to improve field service efficiency. In the search for increased revenue opportunities, training can also assist field agents in identifying, recording, and communicating additional sales opportunities based on their conversations with customers.

- **Consider Moving Away from Static Shifts.** Seventy-one percent (71%) of Best-in-Class organizations rely on static or seasonal shift patterns for their service workforce. This can be extremely inefficient when considering the dynamic nature of service demand. More dynamic shift scheduling patterns, either tied to asset maintenance cycles or business forecasts, can help these organizations be more responsive with leaner field-service worker levels. It also allows the organization to develop a more strategic contingent labor reliance plan.

**Aberdeen Insights — Summary**

Field service goals are aligned with those of the service organization. Ninety-one percent (91%) of all respondents indicate that field service goals of increased revenue and customer satisfaction match those of their entire service organization. More so, 90% indicate that these goals align with those of the entire organization. Given the increasing importance of customer service and support to overall business sustainability, and the vital role that field service plays in determining customer service levels, the selection, management, allocation, and empowerment of the field service workforce can have a significant impact on the viability of an organization, moving into 2013 and beyond.

"Field service impacts the customer’s ability to use their equipment when they need it. Their experience with field service providing preventative service and responsiveness to unplanned outage is critical to minimize disruptions in use of the equipment."

~ Andy Huber, Manager of Systems Strategy, Xerox Technical Services
Appendix A: Research Methodology

Between December 2012 and January 2013, Aberdeen examined the experiences and intentions of 156 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 (19%); Vice-President or Director (36%); and Manager (26%).

- **Industry**: The following industries had the largest representation in the study: Industrial Equipment / Product Manufacturing (20%); IT Services (19%); Computer Equipment and Consumer Electronics (14%); Medical Devices and Services (11%); and Home Services (10%).

- **Geography**: The majority of respondents (51%) were from North America. Remaining respondents were mostly from the Asia-Pacific region (12%) and from EMEA (30%).

- **Company size**: Thirty percent (30%) 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 34% of respondents were from small businesses (annual revenues of $50 million or less).

- **Field Service Headcount**: Twenty-six percent (26%) of respondents were from large service enterprises (field technician headcount greater than 500); 40% were from midsize service enterprises (field technician headcount between 50 and 500); and 34% of respondents were from small field service businesses (technician headcount less than 50).

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**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 9: The PACE Framework Key

<table>
<thead>
<tr>
<th>Overview</th>
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<tbody>
<tr>
<td>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:</td>
</tr>
<tr>
<td><strong>Pressures</strong> — external forces that impact an organization’s market position, competitiveness, or business operations (e.g., economic, political and regulatory, technology, changing customer preferences, competitive)</td>
</tr>
<tr>
<td><strong>Actions</strong> — 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)</td>
</tr>
<tr>
<td><strong>Capabilities</strong> — the business process competencies required to execute corporate strategy (e.g., skilled people, brand, market positioning, viable products / services, ecosystem partners, financing)</td>
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<tr>
<td><strong>Enablers</strong> — 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)</td>
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</table>

Source: Aberdeen Group, January 2013

Table 10: The Competitive Framework Key

<table>
<thead>
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<th>Overview</th>
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<tbody>
<tr>
<td>The Aberdeen Competitive Framework defines enterprises as falling into one of the following three levels of practices and performance:</td>
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<tr>
<td><strong>Best-in-Class (20%)</strong> — Practices that are the best currently being employed and are significantly superior to the Industry Average, and result in the top industry performance.</td>
</tr>
<tr>
<td><strong>Industry Average (50%)</strong> — Practices that represent the average or norm, and result in average industry performance.</td>
</tr>
<tr>
<td><strong>Laggards (30%)</strong> — Practices that are significantly behind the average of the industry, and result in below average performance.</td>
</tr>
</tbody>
</table>

In the following categories: |
| **Process** — What is the scope of process standardization? What is the efficiency and effectiveness of this process? |
| **Organization** — How is your company currently organized to manage and optimize this particular process? |
| **Knowledge** — What visibility do you have into key data and intelligence required to manage this process? |
| **Technology** — What level of automation have you used to support this process? How is this automation integrated and aligned? |
| **Performance** — What do you measure? How frequently? What’s your actual performance? |

Source: Aberdeen Group, January 2013

Table 11: The Relationship Between PACE and the Competitive Framework

<table>
<thead>
<tr>
<th>PACE and the Competitive Framework – How They Interact</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, January 2013
Appendix B: Related Aberdeen Research

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

- State of Service Management: Outlook for 2013; January 2013
- Mobility and the Consumerization of Field Service; January 2013
- Field Service 2012: Mobile Tools for the Right Technician; July 2012
- Field Service: Themes in Automation and Empowerment; April 2012
- Field Service 2012: The Right Technician; February 2012
- State of Service Management: Forecast for 2012; January 2012
- Field Service 2011: Mobility and the Extension of the Service Enterprise; July 2011
- Field Service 2011: Trends in Workforce Management; January 2011

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

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