

June 2013

Service Parts Management 2013: Align Planning and Forecasting with Efficient Resolution

The relationship between a plan and execution often does not lead to a successful outcome. Service execution is no different; organizations search for the data and insight to improve visibility into future demand in order to ensure the right parts are available with the right team in place to deliver that part to the right customer in order to resolve issues. In March and April 2013, Aberdeen surveyed 167 manufacturing and service organizations and highlighted the key trends in regard to service parts management. This Analyst Insight will highlight the best practices in regard to service parts planning, forecasting, inventory management, and parts delivery. Top performing organizations have been able to efficiently manage service parts inventories and deliver these parts to customers within service level agreements (SLAs) while bolstering margins for the overall organization.

Service Parts Differentiation

The customer has been at the forefront of service for years; this still is the main driver for many operations within the organization. In particular, nearly half (45%) of all organizations sampled have increased their focus on service parts management as a result of the added demands from customers to improve service-issue resolution (Figure 1). In conjunction with the added pressure from customers, organizations are finding increased competition in service. Therefore, companies must continue to improve the service parts operation in order to not only deliver exceptional service but also differentiate their offerings to combat an ever-crowded marketplace.

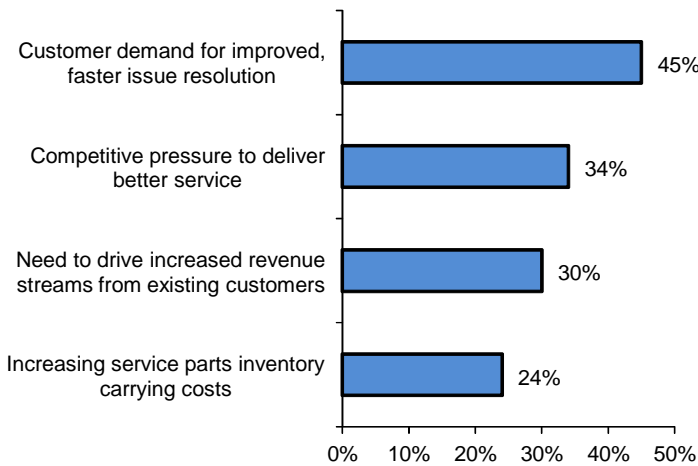
Analyst Insight

Aberdeen's Insights provide the analyst's perspective on the research as drawn from an aggregated view of research surveys, interviews, and data analysis.

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If you would like to gain insight into how efficient service parts management can help drive service excellence and the customer experience join Aberdeen at its 8th Annual Chief Service Officer Summit on October 22-23, in Boston, MA. Register at www.chiefserviceofficer.com

Figure 1: Customer Still First, But the Competition is Gaining



Top Pressures, Percentage of Respondents, n = 167

Note: Respondents asked to select top two.
Source: Aberdeen Group, April 2013

Service parts are often looked upon to drive down costs for the organization mainly in regard to holding costs that can increase with excess inventories to resolve expected and unforeseen demand. However as seen in Aberdeen’s *State of Service Management: Outlook for 2013* research (January 2013) service and parts management can help stimulate revenue growth when service is run as a profit center. In this current service parts research nearly one third of organizations sampled specifically focused on the parts operations to increase revenue streams from an existing customer base (30%). In order to generate these newer channels, service organizations are re-evaluating parts prices to better align with competition and customer perceived value, adjusting service contracts to match the parts timeline demands of the customer, and reselling returned parts that have been repaired.

Even though there is a growing focus on revenue generation, still approximately one fourth of organizations (24%) sampled identify rising spare parts inventory costs as a top pressure facing the service organization. These costs associated with carrying excess inventory cannot be overlooked as they can quickly tug at the revenue gains achieved by the service organization and shrink margins.

History Not a Great Judge of Future Outcomes

In the advent of the technology age where data and information rapidly flow from one point to the other, service must be ready to adjust to changes in customer needs, inventory levels, and market conditions globally. Unfortunately, nearly half of respondents stated that matching the service parts forecast to actual service demand is a major challenge impacting the ability to resolve customer issues (see sidebar). Forecasts may seem like a

Fast Facts

Top challenges in regard to overall service parts management:

- ✓ Inventory visibility – ability to track parts throughout the service lifecycle – 50%
- ✓ Managing the end of life of a part / product – 42%
- ✓ Quality of service spare parts forecasts – match service demand – 41%
- ✓ Balancing inventory across all stocking locations – 38%
- ✓ Siloed nature of the organization – 37%
- ✓ Variability of part lead times – 37%

Note: Respondents asked to select top four.

necessary evil, but a poor forecast can quickly lead to increased costs of holding onto excess inventory, unmet SLAs due to a lack of the right parts available to technicians, unhappy customers as a result of prolonged downtime, and finally shrinking service margins with the departure of these unsatisfied customers. In order to provide increased visibility and improved alignment between forecasts and service needs, top performing organizations have implemented strategies to both automate key processes and increase collaboration amongst the overall organization and service (Table 1). Automation of parts management processes like forecasting and demand planning helps create systems that aren't reliant on human judgment and historical data alone. It is important that these processes leverage the valuable data captured and incorporate that into models that can better predict future service demand in an ever-fluctuating landscape.

Fast Facts

Top challenge in regard to achieving accurate service parts forecasts:

- √ Forecast solely based on historical data – 32%
- √ Demand fluctuates widely with little to no pattern – 27%
- √ Inability to capture quality data from customers, products, parts – 23%

Table 1: Strategies That Bring Visibility and the Right Actions

Strategic Actions	Percentage of respondents, n = 167	
	Best-in-Class	All Others
Automate service parts management processes (i.e., parts planning, demand planning, parts forecasting)	60%	47%
Increase collaboration amongst functions (i.e., logistics, operations, sales, engineering) and service	40%	48%

Note: Respondents asked to select top two.
Source: Aberdeen Group, April 2013

Also, as more of these processes are automated and data stored, the ability for service to collaborate with other business functions can be strengthened. Currently, just under half of all organizations (48%) leverage service parts management to increase collaboration across business functions and service. The value that other functions can glean from valuable service parts data is immeasurable. For example, engineering can design more efficient and serviceable products or parts as a result of failure data coming back, sales can better communicate the value of parts based on the needs from customer use data, and operations can ensure the appropriate stock is available with field service data in regard to part replacement information.

Best-in-Class Performance

Top-performing organizations have leveraged strategies of automation and collaboration to spur key performance indicators (KPIs) in service parts management. Improvements in the service parts operations positively impact operational metrics like part fill rate, customer-facing metrics like SLA compliance, and efficiency metrics such as first-time fix (Table 2).

Table 2: Top Performers Achieve 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"> ▪ 94% spare-part fill rate ▪ 91% first-time fix rate ▪ 65% SLA compliance ▪ 5% improvement (decrease) in spare-part inventory costs in the last 12 months ▪ 2% improvement (decrease) in stock-out costs in the last 12 months ▪ 3% improvement in spare-part inventory accuracy rate in the last 12 months
Industry Average: Middle 50% of aggregate performance scorers	<ul style="list-style-type: none"> ▪ 61% spare-part fill rate ▪ 47% first-time fix rate ▪ 40% SLA compliance ▪ 2% worsening (increase) in spare-part inventory costs in the last 12 months ▪ 1% worsening (increase) in stock-out costs in the last 12 months ▪ 2% improvement in spare-part inventory accuracy rate in the last 12 months
Laggard: Bottom 30% of aggregate performance scorers	<ul style="list-style-type: none"> ▪ 36% spare-part fill rate ▪ 32% first-time fix rate ▪ 34% SLA compliance ▪ 8% worsening (increase) in spare-part inventory costs in the last 12 months ▪ 4% worsening (increase) in stock-out costs in the last 12 months ▪ 3% worsening in spare-part inventory accuracy rate in the last 12 months

Source: Aberdeen Group, April 2013

The importance of efficient service parts management revolves around the concept of the right part at the right time, however Best-in-Class organizations also excel at shrinking inventory volumes while retaining customers through exceeding SLAs (see sidebar). The accuracy achieved from improved parts insight, both in forecasts and evaluation and execution of current demand have enabled top performing organizations to cut down on the volume of inventory needed to resolve customer issues without increasing the cost to the business or to the customer.

The CSO's Impact on the Parts Organization

The impact of service on the financial and operational success of the organization is no longer a byproduct or secondary thought that is the result of a product sale. Top performing organizations have unearthed the value of leading with service and tapped into this increased revenue stream.

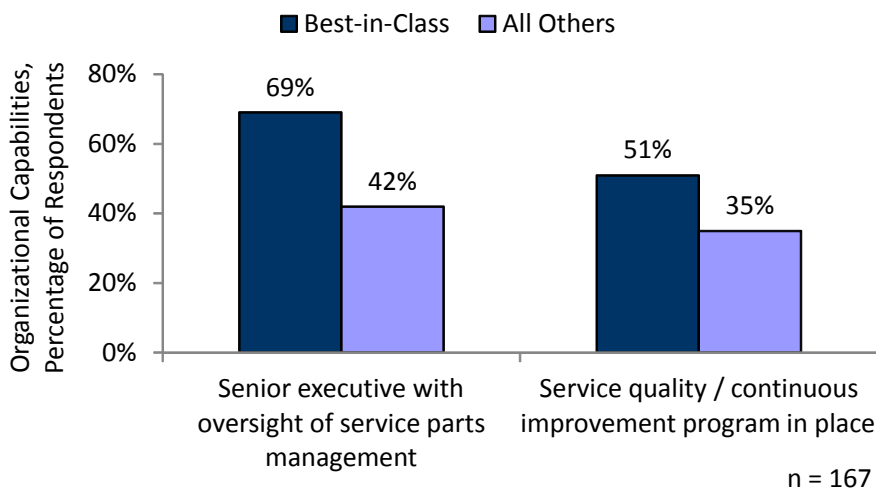
Analyst Insight

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

- √ 12-month change in Spare Part Inventory Volume
 - Best-in-Class – 4% improvement
 - All Others – 3% worsening
- √ Customer retention
 - Best-in-Class – 75%
 - All Others – 51%

As seen in Aberdeen’s *State of Service Management* research (January 2013), more than half of the Best-in-Class have focused on new service offering development with another 45% investing in additional resources around service leadership. Service is not viewed as a post-sales activity in many Best-in-Class organizations but rather as a strategic differentiator for the future viability of the organization as a whole. Service leadership and the Chief Service Officer (CSO) is not solely in place to formulate the high level strategic vision for the service business — more than two thirds of the Best-in-Class have implemented a service executive specifically with oversight of service parts management as compared to less than half of All Others (Figure 2).

Figure 2: Organizational Capabilities



Source: Aberdeen Group, April 2013

The importance service leadership has to service parts is clear, but it is also imperative that organizations continue to tap front-line staff to identify ways to improve operational efficiency. These teams interact with the customer and parts on a daily basis and have the insight to pinpoint areas of improvement. Best-in-Class organizations are 46% more likely than All Others to have service quality and continuous improvement programs in place (i.e., Lean, Six Sigma) to not only foster an environment of innovation but also execute on these creative ideas (51% vs. 35%).

Link Parts Data with the Plan for Future Demand

For many organizations the problem is no longer “how do we capture more data” but rather “how can better insight be gleaned from the vast amounts of data at their fingertips?” In Aberdeen’s 2013 *State of Service Management* report (January 2013), top performing organizations prioritized investments in knowledge management and business intelligence to more effectively take data and turn it into insights. In particular, to service parts management, the Best-in-Class are 48% more likely than All Others to use parts data to aid

Fast Facts

Service quality / continuous improvement program in place (i.e., Six Sigma, Lean):

In Place:

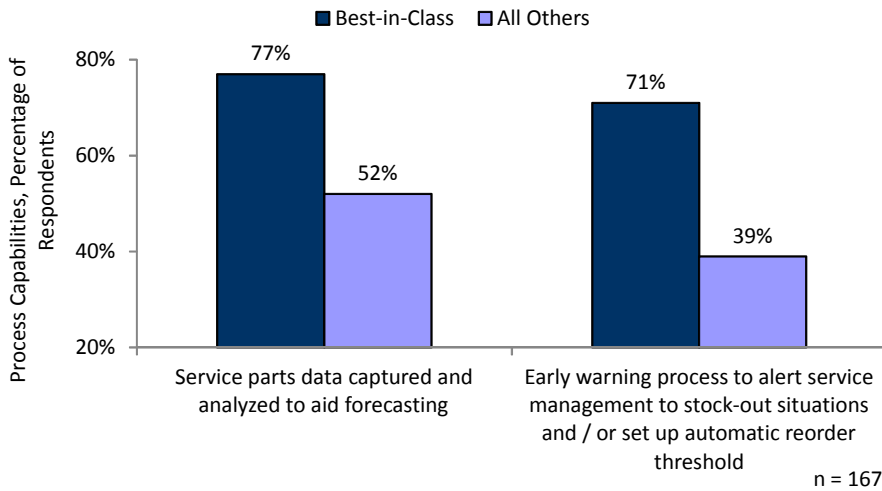
- ✓ Spare Part Fill Rate – 77%
- ✓ First-time Fix Rate – 61%
- ✓ y/y Spare Part Inventory Accuracy Rates – 3% improvement

Not in Place:

- ✓ Spare Part Fill Rate – 49%
- ✓ First-time Fix Rate – 46%
- ✓ y/y Spare Part Inventory Accuracy Rates – 2% worsening

the forecasting of future service needs (77% vs. 52%) (Figure 3). Data for data's sake can be irrelevant, but the insights afforded from this data to drive strategic action can be invaluable for the service organization and overall business.

Figure 3: Process Capabilities



Source: Aberdeen Group, April 2013

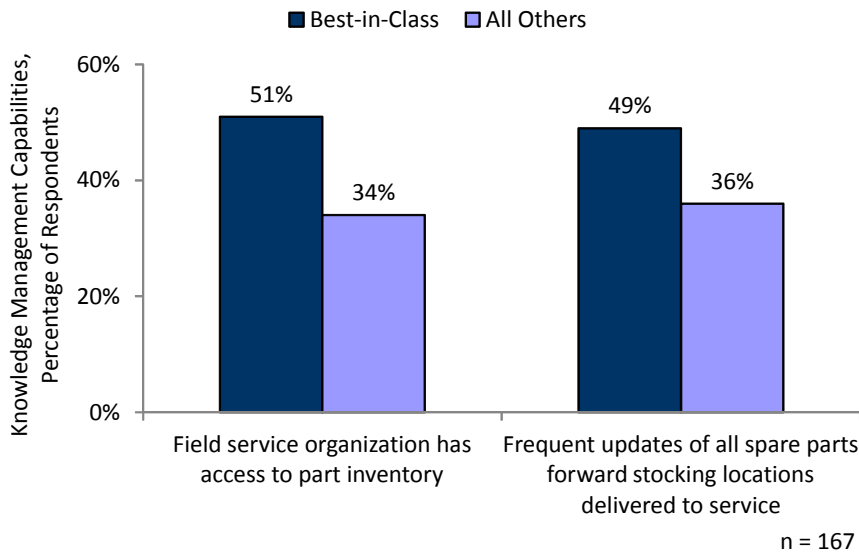
The needs of customers change quite rapidly and their expectations for speedy resolution are constant. Therefore organizations must find better ways to predict the future needs of the customer. The Best-in-Class are nearly twice as likely as All Others to implement an early warning process to alert service management of potential problems (i.e., stock outs) (71% vs. 39%). This proactive strategy to maintain the necessary inventory to resolve future customer service demands is key to the outperformance of the Best-in-Class in metrics such as spare part fill rate, first-time fix, and improvements in stock-out costs as compared to All Others.

Service Parts Information Fuels the Field and Strategy

The link between the field service operations and service parts is undeniable. As seen in Aberdeen's [Field Service 2013: Workforce Management Guide](#) report (February 2013), the top reason for a repeat visit is due to the technician not having the right part when he or she gets on site. This may seem like a rudimentary issue, e.g., in order to fix a problem the tech needs the right parts to fix the down asset, however as seen in this current service parts research just over half of all Best-in-Class organizations (51%) provide the field service team with access to part inventory (Figure 4). Without this link between parts and field service, costly repeat visits will continue to back up the schedules of technicians, leading to down assets lingering on shop floors, driving unhappy customers to look elsewhere for service, and ultimately resulting in lost revenues for the service organization. This

trickledown effect belabors the point that often gets missed — the success of field service is very much dependent on the parts and vice versa.

Figure 4: Knowledge Management Capabilities



Source: Aberdeen Group, April 2013

As more information is made accessible to other service functions and business units across the organization, it is imperative that this data provides both quality insight and is up to date. In Aberdeen’s previous research on [Optimizing the Service Supply Chain: Managing the Network to Link the Customer to Satisfaction](#) (July 2012), top performing organizations struggled to have full visibility throughout the service part lifecycle (i.e., inventory visibility, order status information, shipment status, and return status). In order to resolve these issues around lack of part visibility, nearly half of all Best-in-Class organizations (49%) in this current parts research provide frequent updates of all spare-parts forward-stocking locations to service management as compared to just more than one third of All Others (36%). Real-time data is key to equipping service leadership with the insight to make strategic decisions for the service business while also providing front-line employees with the information to execute service delivery in the field.

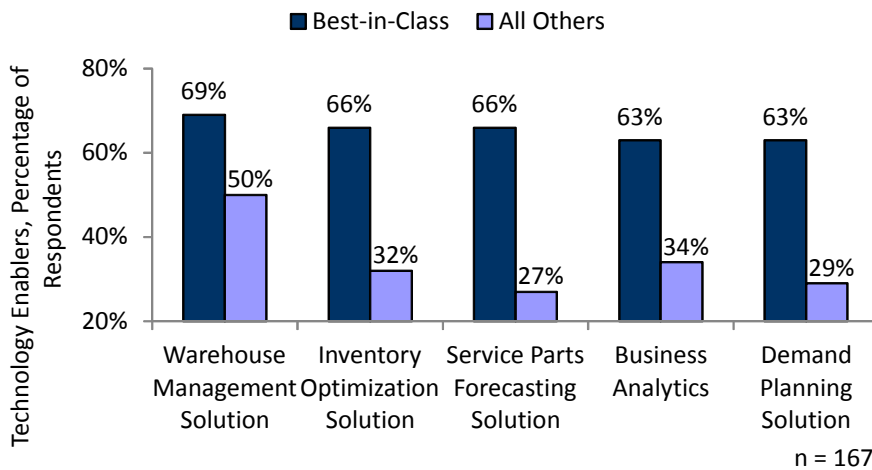
Recommendations

The efficient management of service parts has become a strategic business operation which can drive not only operational efficiencies but also revenues and customer value. In order to continue to improve the service parts operation, organizations should focus on the following recommendations:

- **Implement technology tools to automate key processes within the service parts operations.** The service parts lifecycle

is not only quite complex but also impacts many stakeholders both internally and externally. In order to combat this challenge, the Best-in-Class have implemented a number of tools to improve the quality and effectiveness of parts data (Figure 5). Tools such as service-parts forecasting, business analytics, and demand planning allow management and teams to more accurately allocate resources to execute on fluctuating service demand.

Figure 5: Technology Enablers Buoy Best-in-Class Performance



Source: Aberdeen Group, April 2013

- Enable automatic rebalancing of inventory throughout the parts network.** Just over half of all Best-in-Class organizations (51%) automatically rebalance inventory throughout the logistics network, which is integrated with the planning recommendations of redistribution orders, as compared to only 14% of All Others. The ability to make real-time inventory adjustments helps avoid costly stock outs in a given location while also ensuring the right parts are available when needed throughout the service-parts lifecycle. Customers no longer wait for service and support, and the organization must put every resource available in place to manage service parts both with automated processes and with physical resources to resolve these complex issues.
- Update service management of all spare-parts forward-stocking locations in near-real time.** Best-in-Class organizations are 36% more likely than All Others to provide daily or more frequent updates to management, thus enabling real-time insight into the capability of the service team to meet demand. This tactical data allows management to build strategies and reallocate resources based on the needs of the business. But with only half of all the Best-in-Class empowering service management with this insight there is opportunity for improvement. Those organizations that have provided this level of detailed data have achieved

Fast Facts

Daily or more frequent updates of all spare parts forward stocking locations delivered to service management:

In Place:

- ✓ First-time Fix Rate – 60%
- ✓ SLA Compliance – 59%
- ✓ y/y Stock Out Costs – 1% improvement

Not in Place:

- ✓ First-time Fix Rate – 46%
- ✓ SLA Compliance – 33%
- ✓ y/y Stock Out Costs – 2% worsening

measurable improvements in first-time fix rates, SLA compliance, and stock out costs.

- Share service part information with the supplier network.**
Service networks continue to become more complex both as a result of the need to support broader footprints and due to the need for real-time data into each function within the service lifecycle. The Best-in-Class are more than two times as likely as All Others to provide part return or failure data with suppliers to improve quality (49% vs. 23%). In order to provide this level of insight, nearly half of all the Best-in-Class have implemented a supplier management solution as compared to only 25% of All Others. Not only have top performing organizations implemented solutions and put processes in place to manage a complex supplier network, nearly half of all Best-in-Class organizations (43%) have an incentive program in place to tie suppliers with end customer SLA attainment as compared to only 17% of All Others. Suppliers must be held accountable to both the operational and financial goals of the organization, but also to the customer-facing metrics that support these goals.

For more information on this or other research topics, please visit www.aberdeen.com.

Related Research	
<p>Key Trends in Returns Management; April 2013</p> <p>Field Service 2013: Workforce Management Guide; February 2013</p> <p>Fixing First-Time Fix: Repairing Field Service Efficiency to Enhance Customer Returns; March 2013</p> <p>State of Service Management: Outlook for 2013; January 2013</p>	<p>Convergence 2012: People and Parts Linked Together to Solve Customer Issues; November 2012</p> <p>Optimizing the Service Supply Chain: Managing the Network to Link the Customer to Satisfaction; July 2012</p> <p>Service to Services: Revenue and the Development of New Opportunities; June 2012</p>
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