Having the latest and best product knowledge helps OEMs improve service and product quality and optimize customer value. But how do manufacturers get this vital product information? A product-centric approach to warranty and contract management can be key.

Imagine if a warranty or service contract was able to generate a record of product history. It could be used to track the full record of a product’s performance throughout its serviceable life. The manufacturer could then apply this insight to create a continuous cycle of service and product improvements.

Introduction

Most manufacturers today are committed to improving their warranty and contract management processes. Their aim: to increase operational efficiency.
Toward this goal, most manufacturers have implemented systems and software for automating their warranty- and contract-related tasks. Tools for claims processing and tracking, parts returns, supplier recovery, and other functions are proven and popular. Systems for in-depth warranty analytics are in especially high demand right now.

These IT investments have delivered benefits; most manufacturers can point to substantial productivity gains and measurable reductions in the cost of warranty. But as many are now experiencing, there may not be all that much more to squeeze out of their individual warranty and contract management processes. Management can see that further investments in pure transactional improvements are likely to yield diminishing returns.

This is why leading manufacturers today are looking at warranty and contract management through a lens of strategy. They are not satisfied to simply improve transaction processing—instead they have a warranty and contract strategy to improve product and service performance, which reduces warranty costs and improves the overall performance of service and customer value.

Putting the product at the center of warranty and contract management

The opportunity, as many manufacturers can see, is that if products are performing as intended—the cost of warranty is lower and customer value is higher. It also reduces the cost of service by lowering warranty claims, which in turn lowers the risks and burdens associated with them. The value that optimizing product performance adds to the manufacturer’s business is realized in both increased customer satisfaction and an improved bottom line.

So how can manufacturers achieve this added value? The critical success factor, as PTC has observed in our work with industry leaders, is to put the product itself at the center of the warranty and contract management solution.

This white paper makes the case for a product-centric approach to warranty and contract management—and provides value-driven manufacturers with a step-by-step guide for getting started.

▶ Step 1: Think bigger. Manage strategically. Outperform competitively.

In the past, it may have seemed enough for a manufacturer to ask of their service organization, “How can we streamline our warranty operations? How can we cut our warranty costs?” The company might then explore how to make improvements at an operational level, or even strictly at the departmental level of warranty management.

Not so today.

Manufacturers now increasingly view warranties and contracts as more than simply a cost burden, more than simply a service process to be made more efficient. With margins from product sales declining, manufacturers are looking to the service areas of their business for new revenue and profit opportunities. And they recognize the competitive advantages available to them through improved warranty and contract management.

Costs and Gains

7%

The world’s manufacturers spend anywhere from 0.5% to 7% of product revenue on warranty claims each year.¹

$50,000,000,000

In the United States alone, manufacturers’ annual costs for warranty claims add up to approximately $23 billion in lost opportunity.¹ Worldwide this cost totals to $50 billion or more.²

30%+

Yes, the costs of warranty claims are high. But service contracts and warranties also drive revenue gains. Recent industry research shows that they contribute about 31% of total service revenue for the world’s manufacturers today.³ With best-in-class service performance, the rate of revenue from service contracts and warranties can rise significantly more—and the costs of claims can drop substantially.
Recent industry research bears out management’s evolving perspectives. See the “Pressure to Be Better” findings below. What was once largely thought of as a check-the-box requirement—a cost of doing business—today stands out as a prime strategy opportunity. Manufacturing executives now aim to use innovative better warranties and contracts to help differentiate their company’s offerings and stay ahead of the pack.

As leading manufacturers are seeing, smarter handling of their warranty and contract management processes can provide the critical service and product insights needed to improve service and product outcomes and increase value to the customer.

▶ Step 2: Grab the gain and ditch the pain. How? By breaking down the silos.

Manufacturers generally recognize the immense opportunity that better warranty and contract management represents. They see the “chain of gain” it promises to deliver:

1. Better warranties and contracts generate better product knowledge.
2. Better product knowledge leads to better warranty, service and product performance.
3. Better warranty, service and product performance leads to happier customers.
4. Happier customers are likelier to remain customers. And when customers see the increased value they’re getting from their products, they tend to buy more—and they refer more new prospective customers to the manufacturer.
5. Retaining and growing of current customers, combined with finding and nurturing new customers, increases the manufacturer’s revenue, profits, and market share.
6. A better bottom line means a better company—and increased shareholder value.

Of course, there’s the threat of the opposite effect—the “chain of pain” that can occur when a manufacturer fails to obtain better product knowledge through smarter warranties and contracts. They may miss the chance to add value and delight customers with their intelligence-driven service and product improvements. Revenue, profits, and market share may strain to keep up. The manufacturer may fall behind competitively.

The table on page 4 charts challenges and opportunities in warranty and contract management. It’s based on PTC’s work with industry leaders worldwide. None of the pains described here are insignificant. Yet, as manufacturers often tell us, of all the difficulties they face, functional silos are typically their biggest barriers to success.
### The Manufacturer’s Pain

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<th>The Product-centric Opportunity</th>
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<tr>
<td>Manufacturers spend up to 7% of product revenue on warranty claims annually.⁴</td>
<td>A better-performing product minimizes warranty claims, resulting in lower service costs that significantly improve profitability.</td>
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<td>Up to 70% of product components are sourced from the manufacturer’s suppliers, yet suppliers now pay less than 15% of warranty costs.⁵</td>
<td>Supplier recovery improves. Manufacturers can significantly recover costs when they hold their suppliers accountable for their share of warranty entitlements related to supplier-specific parts that are returned under warranty.</td>
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<td>Manufacturers typically need 9 to 12 months to make a significant change in the product when a quality problem occurs in the field.⁶</td>
<td>The cycle time for design changes can be cut in half when warranty analytics provide timely, accurate product information for assessment. Analytics also create a systematic method for tracking and improving contract performance.</td>
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<td>Fewer customers are choosing to attach warranties and service contracts to their new product purchases.</td>
<td>Better warranty and contract management increases customers’ trust and confidence—both in the quality of the product and the quality of service they receive. They tend to buy service contracts and warranties more readily. This increases service revenue.</td>
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<td>Warranty and contract management processes are disconnected, inefficient and yield unpredictable outcomes.</td>
<td>The product-centric approach helps the manufacturer integrate and streamline processes. They do more with less and can reinvest savings. Profits rise. And customers get more value from their use of the product.</td>
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### Challenges and Opportunities in Warranty and Contract Management

Silos not only divide warranty and contract processes, they separate service teams from each other and from the design, engineering, and manufacturing organizations that can benefit from their product insights. With disconnected departments and processes, the manufacturer’s opportunities for cross-enterprise efficiencies and synergies are lost.

Breaking down the silos—it’s crucial for ditching the pain and grabbing the gain. Product-centric warranty and contract management can be just the silo-buster needed.

#### Step 3: Benchmark to measure warranty and contract management performance.

Manufacturers can use the Warranty Management Capability Maturity Model (on page 5), a tool courtesy of IDC’s Manufacturing Insights, as the framework for assessing their current performance in warranty and contract management—and for seeing where they need to improve.

Note that the manufacturer, at any particular time, may not fit perfectly into the model; they may be at one level for a particular dimension of performance measurement, and at a different level for another measurement dimension. Still, the model can help build the vision and set a clear path for process improvement.

The manufacturer’s aim, in PTC’s view, should be to steadily move up the scale—from reactive to proactive, and from transaction-focused to quality-driven in warranty and contract management. Smart planning and commitment are required. No stages in the model can be skipped. A product-centric approach can enable it all.

#### Step 4: Map out the warranty and contract management lifecycle. At center: the product.

One factor, in particular, has moved leading manufacturers to a value-driven, product-centric strategy for their warranty and contract management processes. It’s their never-ending quest for the latest and best product knowledge.
Management is increasingly aware that practically nothing tracks a product’s performance in the field better than the information gained from service events during the warranty or contract period. This data can literally write a product’s history. It feeds all aspects of the service organization, as well as engineering and manufacturing—with vital insights. The manufacturer can use this intelligence to improve product outcomes that enhance the user’s experience, and nurture the customer relationship.

The product-centric approach to warranty and contract management is conceptually illustrated below. The solution puts a single, comprehensive data warehouse of warranty and product information at the center of the warranty lifecycle. New information on product performance captured throughout the warranty period is stored here.

Regularly analyzing this warranty history helps the manufacturer detect service issues and take corrective actions quickly. They can anticipate service needs throughout the product’s serviceable life. This limits warranty exposure and minimizes warranty costs. The manufacturer thus increases service profits while increasing customer value.

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**Warranty Management Capability Maturity Model**

1. **Ad hoc**
   - Ad hoc transaction-based processes followed casually
   - Unsystematic exception management
   - Hodgepodge communication
   - No investment in warranty software tools; no automation

2. **Managed**
   - Warranty quality connection established, albeit inconsistently
   - KPIs focus on transactions, basic finance
   - Initial benchmarking effort and sharing of best practices
   - Cost recovery emphasized; structured approach
   - Investment in IT tools to manage basic transactions and finance

3. **Integrated**
   - Blended KPIs extending into transactions, finance, quality, customer satisfaction, etc.
   - Periodic benchmarking, including external benchmarking
   - High visibility within the organization (VP or above)
   - Investment in IT tools to improve operations; analytics, early warning

4. **Optimized**
   - Warranty data drives quality and design improvement
   - Proactively manage quality and financials
   - Predictive analytics; focus on leading indicators
   - Enterprisewide decision making
   - IT tools: advanced analytics, decision support systems

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Step 5: Align warranty and contract processes with the as-maintained BOM.

In the product-centric view, manufacturers use product knowledge to help optimize their performance at every point in the warranty and contract lifecycle—from claims processing and tracking through parts returns, supplier recovery, and analytics.

Service teams work to capture new product insights with every warranty and contract event. This information helps create what many in manufacturing have long viewed as something of a holy grail in service lifecycle management: the as-maintained bill of materials. Think of this as a complete and continually updated product configuration, instantly referenced by authorized users from wherever they can securely access it online.

Having the latest and best product knowledge in the as-maintained BOM helps the manufacturer’s service teams save time, reduce errors, and cut costs in service delivery.

Step 6: Bring it all together. Close the loop on warranty and contract management.

The product-centric approach not only serves the warranty chain, it helps drive efficiencies across all service operations. Everyone from service planning to the help desk, from the parts counter to the service technicians working directly with customers in the field, can rely on the up-to-date product knowledge in the as-maintained BOM.

And so can the company’s design, engineering, and manufacturing organizations, as they look to the latest product insights, derived from service, which enables them to respond quickly to issues in the field and take measures for future prevention.

This, in the end, is the advantage of product-centric warranty and contract management. And it’s the most compelling reason for adopting the approach. The manufacturer can create a continuous loop of service and product improvements.

The ultimate beneficiaries, of course, are the manufacturer’s customers. They are, after all, who depend most on the best product and the best service for increased value.

CASE STUDY
Mitsubishi Caterpillar Forklift America

Better Warranty Data, Better Warranty Process, Better Warranty Results

Want proof of how a manufacturing leader’s focus on improving warranty management performance can boost service productivity and profitability?

Spotlight, please, on Mitsubishi Caterpillar Forklift America, Inc. (MCFA). You probably know this Houston-headquartered company best for their Mitsubishi Forklift trucks, Cat® lift trucks, and Jungheinrich® warehouse products.

In 2008, MCFA assessed their legacy warranty management system and judged it lacking. Only some warranty information could be captured electronically. All claims were printed, with changes noted on paper and manually entered into a database. Much information had to be transferred manually between company departments; this increased the chances of important information being missed or getting lost.

MCFA’s service professionals and dealers were not only suffering from incomplete claims information and longer-than-needed processing times, they were sometimes capturing data that wasn’t needed at all. About 10% of stored data would eventually be discarded when claims analysts found it to be irrelevant to their coverage areas. Precious time and manpower were going to activities adding little value to the claims process.

In short, MCFA had a warranty data problem. Yet they also had a warranty data opportunity. And the company’s service organization didn’t miss their chance to grab it.

Since deploying their new data-driven warranty management solution, MCFA has transformed their claims process from a largely manual, error-prone undertaking to a smoothly automated workflow. The solution has improved MCFA’s warranty data quality, process efficiency, and performance accuracy in fundamental ways.

Bottom line: Streamlining warranty claims operations, with better warranty data, has helped MCFA smartly navigate a tough economy and stay ahead competitively.
The faster we can get the dealers’ feedback on warranty claims, the faster they can react and make adjustments.”

Kevin Krakora, Director of Product Service
Mitsubishi Caterpillar Forklift America

The Best-in-Class Imperative

89% In a 2011 study, manufacturers identified by Aberdeen Group as best-in-class in warranty and contract management performance retained customers at an average rate of 89%—versus 51% for all other manufacturers surveyed.

90% Per Aberdeen’s study, best-in-class manufacturers renewed 90% of current service contracts, on average. Other manufacturers renewed only 40%.

2% The best-in-class performers cut warranty-related return and repair by an average of 2% over the previous 12 months. Others saw a 1% increase in these costs.

Characterizing the Best-in-Class

53% Aberdeen Group’s survey showed that manufacturers attaining best-in-class performance in warranty and contract management are 53% more likely than other manufacturers to have a dedicated team for managing the end-to-end warranty workflow.

67% The best-in-class are 67% more likely than other manufacturers to have a centralized data storehouse for accessing the latest information on product performance and service contracts and warranties throughout the service lifecycle.

35% The best-in-class are 35% more likely to have their design engineering and manufacturing teams periodically review warranty data to help improve product quality.

Conclusion

In the end, it’s all about the customer.

Or, even more to the point, it’s all about increasing the customer’s value.

This, in PTC’s view, should be the primary driver for a manufacturer seeking to improve their warranty and contract performance. Higher service revenue, lower service costs, increased profitability and market share—these bottom-line benefits can be expected to flow from a strategic investment in product-centric warranty and contract management.

Learn More

For more resources on warranty and contract management best practices, visit PTC.com/go/warranty.

1 IDC Manufacturing Insights, Methods and Practices: Warranty Capabilities Maturity Model, #M1227896, page 1, May 2011.

2 Source: Bearingpoint


5 A typical experience found by PTC customers.