



## Unlocking the Value in Warranty Management

### Executive Summary

Manufacturers that offer a warranty on their products are aware of the pitfalls of warranty management. Claims eat up a sizable percentage of annual revenue, and fraudulent claims are a perennial problem. Supplier recovery is not where it should be, and each department involved in warranty is not necessarily aware of the practices followed by other departments. In addition, many manufacturers do not have a system for capturing and archiving quality problem data to improve the next generation of products.

However, there is positive news, as leading research firms point out. With the right combination of business processes and the latest technology platforms, manufacturers can embark on a path of steady improvement in warranty management practices. Additionally, as a recently published warranty capability maturity model explains, manufacturers can unlock even greater value by using advanced systems and processes around unjustified claims management, supplier recovery and actionable warranty intelligence.

### The Warranty Management Opportunity

For discrete product manufacturers, warranty management has traditionally been an unpalatable but unavoidable cost of doing business, ranging between 0.5% and 7% of revenues annually, according to 2011 estimates.<sup>1</sup> Total

warranty management spend in the U.S. alone stands at \$23 billion in 2011,<sup>2</sup> and globally, this number is estimated by industry pundits to be closer to \$70 billion. Given the magnitude of this expense, manufacturers that offer warranties have a great incentive to reduce associated expenses via warranty management systems and techniques.

Warranty management processes are subject to bottlenecks, errors and lack of visibility. These issues are often attributable to a lack of integration between departments and the resulting lack of informed decision-making due to an inability to gain a holistic view of data across disparate departments involved in the warranty lifecycle. On the positive side, manufacturers can only gain by optimizing their warranty value chains. At a minimum, the potential benefits include reduced costs, improved product quality, faster turnaround and better customer experience.

Most companies begin the odyssey of warranty management optimization by automating the transactional aspect of claims processing and payment. This is a natural starting place, as automation can yield quick and easily quantifiable benefits. As an organization progresses in its approach to warranty management, it becomes possible to focus on higher value activities, such as supplier recovery, early warning and claims authenticity.

Such enhanced warranty management practices can create market differentiation by helping to improve product quality, speed response to potential issues and smooth leakage areas such as unjustified claims and inadequate supplier recovery. If executed effectively, these programs unlock value for the manufacturing organization and create a better customer experience (thus improving customer satisfaction).

### A Framework to Assess Warranty Management Maturity

According to IDC, manufacturers need a consistent and objective method for assessing their own level of warranty management maturity. Toward that end, IDC developed the Capability Maturity Model (CMM), which spans five stages of warranty development, ranging from ad hoc (Stage 0) to optimized (Stage 4) (see box, below). Companies at the earlier stages of the CMM (Levels 0-2) are in reactive mode and are focused on warranty transactions, while those that attain Levels 3 and 4 are proactive and thus are able to pay more attention to quality.

### Warranty Value Chain: Identifying Value Creation Opportunities

At each maturity level – even the early ones – there are actions that we believe manufacturing organizations should undertake to create value.

The overarching goal of any warranty optimization effort is to further business objectives such as improving customer experience (and therefore retention), reducing the cost of poor quality and optimizing processes. However, the choice of which particular area to pursue requires careful consideration. Different focus areas lead to different value-creation opportunities, requiring a holistic approach to investment decision-making. Organizations need to use a structured value discovery approach to make accurate investment decisions, regardless of where they stand on a warranty capability maturity model.

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## Value Realized at CMM Levels 1 and 2

### Claims Processing Automation: Automobile Manufacturer

We developed a scalable and global claims processing platform for a leading automobile OEM that had been struggling with a legacy system and many manual processes, resulting in poor claims process quality. The new claims processing platform has critical international features, including support for multiple languages and currencies. The new platform enabled the auto company to automate 90% of its claims processing compared with earlier manual processes and reduced human resource requirements by more than 150%. Other benefits included real-time customer warranty claim processing, reduced lead time on the warranty claim lifecycle and improved claim information accuracy. The auto company has been able to improve warranty operations efficiency by eliminating duplicate system functionalities and operations support, eliminating redundant IT support costs and reducing claim leakage by improving accuracy.

### Point-of-Service Solution: Automobile Manufacturer

A leading automotive company partnered with us to help with support and enhancements of a custom-built point-of-service application suite. These applications enable technicians to access them via portable devices, with real-time access to the OEM's systems for technical and enterprise quality information. Together, we generated annual cost savings of more than 30% in this multiyear, ongoing engagement, using the right mix of onsite/offshore resources.

## Actions to Take: CMM Levels 0-2

At Level 0, manufacturers have just begun considering how to establish warranty management processes. These organizations are currently managing most warranty processes by exception rather than by standard business processes and technology tools.

Manufacturers at this level should consider taking advantage of the latest advancements in warranty management processes and technology platforms. These organizations can start with a clean slate, so they can look at using the latest commercial products, making decisions on the most suitable and scalable platform to use and also deploying cross-industry warranty management best practices.

At Levels 1 and 2, companies should focus on improving warranty transaction productivity and cost reduction.

Here, a structured approach to defining the warranty vision and a firm implementation plan is the best way forward.

While capturing the proverbial low-hanging fruit is an obvious starting point, organizations can start by deploying automated business process services to administer transaction-oriented claims processing.

At Levels 1 and 2, companies should focus on improving warranty transaction productivity and cost reduction. Here, there are important decisions to be made relating to the technology, tools and processes that are needed to ensure a scalable global warranty management platform.

Broadly, objectives at these beginning levels are two-fold: standardize and improve basic structures while achieving higher transactional efficiencies. Three focus areas are worthy of attention:

- **Point-of-service.** The first steps in this area include implementing a troubleshooting system featuring technical solutions and the ability to look up failure reasons; integrating with device diagnostics and equipment historical information; and engaging a business process services partner for Level 1 technical support and logging of new issues into an information repository. Also important: real-time information exchange systems for sharing field information.

At Levels 3 and 4, organizations need actionable intelligence to improve functions outside of standard warranty operations.

## IDC's Capability Maturity Model for Warranty Management

Level	Characteristics
Level 0 <b>Ad hoc</b>	No automation; transaction-based processes.
Level 1 <b>Standard-ized</b>	Established processes followed but best practices not captured.
Level 2 <b>Managed</b>	Connection made between warranty and quality; initial sharing of best practices.
Level 3 <b>Integrated</b>	Blended KPIs extending into transactions, finance, quality, customer satisfaction.
Level 4 <b>Optimized</b>	Warranty drives quality and design improvement.

Figure 1

- **Claims processing.** The basic system to be implemented is a transactional claims processing system with the ability to limit errors based on static rules. Organizations need to work on establishing standard guidelines for processing at least 80% of claims. Often, they can and should engage a business process services partner to handle both pre- and post-adjudication claims processing.
- **Reverse logistics.** Implementing a module for reverse logistics management is helpful. Organizations should integrate disparate systems to ensure seamless supplier parts mapping and automated parts request services. These systems need to integrate with the supplier contract database for effective decision-making in reverse logistics. Manufacturers should consider partnering with a business process services provider to handle coordination between different parties.

## Actions to Take: CMM Levels 3-4

At the higher levels of warranty management maturity, warranty becomes a visible function across departments, with a real chance of helping to improve the bottom line and stop value "leakage." At Levels 3 and 4, organizations need actionable intelligence to improve functions outside of standard warranty operations.

Companies at Levels 3 and 4 should undertake the following advanced activities to increase their warranty optimization benefits:

- **Implementing advanced, dynamic claims authentication** to identify claims with a high probability of being unjustified, thereby reducing the level of suspect claims. With a typical rate of about 10% to 15% suspect claims, this represents an area for significant savings when coupled with a workflow solution for resolution and financial closure.
- **Improving supplier recovery** driven by cross-functional integration to trace the parts warranty to the appropriate supplier, establishing accountability and allocating proper recoveries. Organizations are grappling with the challenges of identifying the procurement source. Weak supplier analytics often lead to a half-hearted recovery process and substantial write-offs.
- **Establishing automated, predictive models for early warning** to accurately capture emerging field failure patterns. Organizations are now beginning to appreciate the insights that social media monitoring can provide in the context of parts failure and associated issues. The key is to couple unstructured customer feedback with predictive models to pinpoint accurate issues, minimizing false positives.
- **Deriving actionable intelligence.** Most organizations are dealing with the issue of “too much data, too little intelligence.” With critical

data spread across different departments, it is imperative that organizations take a more holistic view of interpreting and converting this data into actionable intelligence for reserve management, quality management and simulation of new warranty programs.

### Optimizing Warranty Process Shortcomings

Our Warranty Value Discovery framework helps manufacturing companies pinpoint their first steps in warranty optimization, along with a strategic roadmap for achieving the most value. The framework serves as a diagnostic assessment offering that determines existing gaps that need to be addressed, as well as key process areas that should be emphasized and how best to leverage existing investments. We kick off the process by providing a current state analysis and then discuss those findings with decision makers. From there, we deliver an opportunity analysis, which includes development of a strategic plan.

We view your warranty chain holistically and offer services that address multiple areas for manufacturers at any stage of the warranty management CMM. For organizations seeking to tackle the “low-hanging fruit” of operational efficiencies, we offer a suite of claims processing business process services. For organizations seeking additional value from warranty management, we have conceptualized a solution to drive enterprise-wide benefits from warranty management.

## Value Realized at CMM Levels 3 and 4

### Early-Warning System: Automobile Manufacturer

We worked with a leading automotive manufacturer to develop an early-warning module based on different alarm evaluations logic with gradually increasing claims detection methods. The system detects 10% more quality alarms that are then taken up for investigation and counter-measure implementation, with the potential for major cost avoidance. The system also provides rich features for claims occurrence trend analysis used in product quality-related decision-making processes.

### Intelligent Supplier Recovery: Automobile Manufacturer

In another engagement with the automotive OEM, we developed a supplier recovery module with automated recovery calculators based on supplier cost-sharing contracts. The new system enabled a supplier claims recovery rate of 56% compared with the previous recovery rate of 30% to 40%. The system also reduced recovery time by using workflows for acceptance and rejection of claims by the supplier and the OEM personnel.

Called WISARD (Warranty Information System for Analysis, Reporting and Decision-Making), our solution is process-centric and technology-agnostic, allowing organizations to leverage existing investments in transactional systems. The solution assimilates data from disparate systems and analyzes the resulting data through different lenses, thereby addressing multiple process breakdowns.

Key aspects of the WISARD solution include:

- **Dynamic analysis** to identify claims with a high probability of being fraudulent, leveraging our IP from similar scenarios in other industries. The engine is “self-learning,” thereby adapting to newer types of fraud and, at the same time, reducing false positives.
- **Improved supplier recovery** through an integrated workflow solution.
- **Predictive analytics** to identify early warning signals and cross-referencing with unstructured customer feedback.
- **Creation of intelligence** from the ocean of data available within organizations through a configurable “meta” model.
- **Anytime, anywhere access**, further reducing operating expenses for customers. This provides the additional flexibility of adopting our solution in an on-premises or on-demand model.

In addition, WISARD presents a good value proposition for manufacturing organizations, as it is designed to generate value from the get-go. WISARD can be used by manufacturing organizations based on a value-sharing model that requires minimum upfront costs.

## Getting There from Here

Warranty claims currently cost manufacturers up to 7% of annual revenues, according to IDC. The consumer electronics, high-tech and telecomm sectors suffer from particularly high annual warranty costs, but high warranty expenses do not have to be a cost of doing business. The good news: Manufacturers can obtain much value through implementation of warranty management best practices and productized services.

Automation claims processing is a natural starting point for companies that are beginning the warranty optimization journey, and they offer accelerated return on investment. For organizations that have progressed further along the warranty management maturity model, however, the areas of claims authentication, early warning and supplier recovery yield great returns.

We can help manufacturing organizations identify and implement value creation opportunities through a structured value discovery approach. Additionally, our solution frameworks such as WISARD extend beyond transaction management to help manufacturers unlock their greatest warranty management potential.

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## Footnotes

<sup>1</sup> According to IDC Manufacturing Insights and SEC filings, 2011.

<sup>2</sup> “IDC Manufacturing Insights to Unveil Groundbreaking Warranty Management Capability Maturity Model at Annual Warranty Chain Management Conference,” IDC press release, March 9, 2011, <http://www.idc.com/getdoc.jsp?containerId=prUS22734611>

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## About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world's leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 50 delivery centers worldwide and approximately 118,000 employees as of June 30, 2011, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world. Visit us online at [www.cognizant.com](http://www.cognizant.com) or follow us on Twitter: Cognizant.



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