



**John Kerr**  
General Manager of Quality  
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Whirlpool Corp.

# WHIRLPOOL: QUALITY MEANS LOYALTY

Whirlpool Corp., the world's leading manufacturer and marketer of major home appliances, envisions the day when its products are in every home, everywhere. To reach that goal, Whirlpool's Global Quality Division is incorporating innovation and analysis to its warranty approach. Using SAS as its BI foundation, Whirlpool looks for significant savings in warranty costs.

## Business Issue

Reduce service calls by finding defects through warranty analysis and correcting them quickly.

## Solution

SAS® Warranty Analysis and early-warning tools on the SAS® Enterprise BI Server distill and analyze warranty claims data to quickly detect product issues.

## Benefits

Whirlpool Corp. aims to cut overall cost of quality in half by 2008, and SAS is playing a significant part in that objective. Expectations of the SAS Warranty Analysis solution include: a six-month reduction in Whirlpool's issue detection-to-correction cycle, a three-month decrease in initial issue detection, and a potential to cut overall warranty expenditures with significant quality, productivity and efficiency gains.

## Whirlpool Brands

Whirlpool, Maytag, Kitchen Aid, Jenn-Air and others

## SAS Products

SAS® Enterprise BI Server, SAS® Warranty Analysis, SAS® Enterprise Guide and SAS® Text Miner

"We've always prided ourselves on operational excellence and in training our Six Sigma Black Belts to use the latest techniques for moving our company ahead," says John Kerr, Whirlpool's General Manager of Quality and Operational Excellence. "Our approach to warranty claims and finding root cause for those claims is no different." And the reason behind their quality efforts? Customer satisfaction.

As Whirlpool looks to enhance an already industry-leading warranty analysis process, Kerr chose SAS Warranty Analysis and SAS Text Miner for his far-reaching staff to perform the critical analysis that unearths problems fast to reduce impact on the customer. "The amount of time my staff was spending on data extraction and manipulation needed to be even faster. We want to focus our attention on the innovation and design of our next-generation products, yet continue to take every precaution possible to deliver a better product to our customers today," Kerr says.

Kerr chose SAS because other vendors didn't understand the detailed statistical requirements of a competitive quality control program. "SAS built us a comprehensive solution and offered us six more techniques they knew had worked for other manufacturers," Kerr says.

SAS supports Whirlpool globally in local languages – important for a company

**"SAS brings a level of analytics to business intelligence that no one else matches."**


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that wants to be in "every home, everywhere" and makes 40 to 50 percent of its sales outside the United States. "We build 20,000 washers a day at one plant alone," Kerr explains. "We have a significant on-going need for cutting-edge techniques to find quality issues quickly. We want to find even the most minor problems at the root cause before they escalate into larger and more expensive problems."

## Platform and data integration

Running SAS Warranty Analysis on the SAS Enterprise BI Server enhances Whirlpool's investment in an SAP R/3 operational environment for in-depth analysis and easy reporting on issues – allowing for proven statistical analysis techniques that are built into the system; a fast, effective reporting system; and a foundation on which to grow use of text analysis for early warning.

SAS integrates terabytes of data volumes from warranty claims and other



systems within manufacturing, the call center, technician reports and more. SAS extracts the data and provides a flexible, agile way to run analysis for faster insight and issue detection. With SAS pulling data from Whirlpool's ServiceBench claims-management system, Whirlpool has automated how it handles claims processing and tracks and monitors the scheduling of claims payments.

"When you eliminate the simple problems, you drive overall failure rates down," Kerr says. "SAS helps us do just that."



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