Automotive Consulting Solution
Warranty Analytics – Schichtlinien & Weibull Analysis
Agenda

1. Benefit for the Customer
2. Description of the Function
3. The Function in the System
4. Technical Information
Customer Benefit

Solution

- Proven solutions/services of SAP Automotive Consulting
- Solutions already running productive at several customers
- Solutions and documentation are available in German and English

Cost

- Exact calculation of implementation cost. Implementation for fixed price
- 6 months of free follow-up services for bug corrections starting at the date of installation within the development landscape. Afterwards chargeable consulting support starts
- No additional ongoing costs (i.e. maintenance cost)

Time

- Prompt implementation possible
- Defined timeframe for implementation
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Warranty Analytics

Warranty Analytics built on SAP HANA enables you to gain instant insight from warranty claims data, facilitate root-cause analysis and predict future failure rates and warranty costs.

Integration
- Integrates warranty claims data, defect codes and production data to provide a holistic view of vehicle failure pattern
- Integrates with SAP Warranty (WTY). Can also work with other warranty data formats

Visualization
- Visualizes warranty claims in various ways (e.g., Schichtlinie, heat map, tag cloud, geographical chart, bar chart) to support detection of failure patterns
- Supports flexible drill-down and drill-up across different levels to facilitate root-cause analysis

Analysis & Prediction
- Built-in Weibull analysis to analyze and predict future failure rates
- Built-in decision tree to facilitate root-cause analysis
- Supports further analytical algorithms extensions

Report & Sharing
- Template reports containing visualization and analytical results
- Supports self-customization of reports
- Reports can be shared via Lumira cloud, email or printed out
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Connect Warranty Related Data Sources

- Use HANA native ETL methods (e.g., Smart Data Integration, Smart Data Quality) to connect warranty related data sources and load the data into HANA as tables.
Integrate Different Data Sources in HANA Views

- Using built-in HANA views to integrate different data sources
Connect SAP Predictive Analytics with HANA

- Import the views created in HANA into Predictive Analytics to perform further analysis
Prepare and Manipulate data in Predictive Analytics

- Tab „Prepare“ enables users to view and preprocess data.

Measure and Dimensions are shown here.

Hierarchies can be created, e.g. time, geography, defect code hierarchy.
Visualization: Tree Map

- Tree map shows failure rate of different vehicle models by defect description and production volume

Click Drill Up to visualize tree map at Defect level 2
Tag Cloud is showing which defect has higher failure rate by weight of the text or higher warranty cost by the color.

Failure rate and Warranty cost (€) by Defect L3
Visualization: Radar Chart

- Radar chart shows which defect has higher failure rate as per production location
Schichtlinie diagram shows failure rate as per time in service by production year and production country
Analysis and Prediction: Weibull Analysis

- Weibull analysis can be performed to analyze and predict vehicle's failure rates
Report: Use Template and Develop Your Customized Reports

- Template reports and customized reports can be generated to show KPIs, visualization and analytical results.
Share: Multiple Sharing Methods

- Print reports or share via email, Lumira cloud or other BI platforms
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Technical Information

Available for SAP ACS WTY (can also work with other warranty solutions)

Activation of industrialized solution necessary

Technical installation is possible remotely

Modification-free
Source of Information

- **Internet**
  Overview-, Detail- and Customer presentations
  
  http://www.sap.com/acs

- **OSS-System**
  Notes (Search term: Automotive Consulting Solutions)
Thank you!

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