Enhancing Warranty Data Analysis with Business Intelligence Tools

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Voice of the customer
Warranty claim framework
Warranty claim data process
Business Intelligence tools
Summary
The New Norm

- Federal Monitors & Criminal Penalties:
  - Increased regulations
  - Federal monitoring
  - Significant fines
  - Criminal penalties
Leveraging: Its Not All Doom & Gloom

**Competitive Advantage:**
- Improved brand
- Customer satisfaction
- Increased revenue
- Leverage

Top-Ranked Brands

<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lexus (tie)</td>
</tr>
<tr>
<td>2</td>
<td>Porsche (tie)</td>
</tr>
<tr>
<td>3</td>
<td>Toyota</td>
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<tr>
<td>4</td>
<td>Buick</td>
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<tr>
<td>5</td>
<td>Mercedes-Benz</td>
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<tr>
<td>6</td>
<td>Hyundai</td>
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<td>7</td>
<td>BMW</td>
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<td>8</td>
<td>Chevrolet</td>
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<tr>
<td>9</td>
<td>Honda</td>
</tr>
<tr>
<td>10</td>
<td>Jaguar</td>
</tr>
</tbody>
</table>

Lexus and Porsche are the top-ranked brands in a tie

J.D. Power (2017)
Leveraging: Its Not All Doom & Gloom

- *Ex of growing expectations*
  - Aggressive target reductions
  - New warranty cost sharing programs
  - New Warranty Metrics

Source: Foster (2016)
Warranty Claim Framework

- **Automotive Repair Data**
  - Consumers
  - Usage and narrative based

- **OE Warranty Databases**
  - Various formats, volumes, accessibility
  - Increasing expectations

- **Tier One Supplier**
  - Compile, analyze, and identify action levels (major contributing conditions & part numbers)
  - React and resolve
  - Predict and prevent

- **Competitive Pressures**
  - Increasing consumer expectations
  - OE & Manufacturer competitive advantage
  - Best in class warranty
Warranty Claim Data Process

Variety + Velocity = Volume (M)
Warranty Claim Data Process

- **Traditional Tools are Ineffective:**
  - Lack Capability, Time Consuming, Tedious, Prone to Errors, etc.
Utilizing Microsoft’s Business Intelligence Tools

Variety

Velocity

Volume

Intelligent Insights
Obtain, centralize claim data
Voluminous, heterogeneous data sources

- Compiling
- Shaping
- Scripting
- Data Model
- Import and analyze ‘Billions’ of distinct data values
- Manage relational data
- Pivot into Visualizer / BI dashboards
So What? How does this help?
Analytic Dashboards

Intelligent Insights

Summary of Warranty Repairs - North America

Compile the Data – Broad / Global View

Narrow the focus – Regional View

Spot the Issues – Conditions by State Action level!
- Warranty Management
- Warranty data claim process
- Traditional tools are ineffective
- Leverage existing BI tools
  - Import
  - Tidy
  - Transform
  - Script
  - Communicate

**Greater intelligence, faster, richer, and WIDER, actionable** insights
  - Knowledge Management
Thank You!

Questions? Comments? Suggestions?