entercoms
Connect | Reveal | Transform

Cut warranty expenses through faster failure trend detection

Fortune 500 Engine manufacturer

A global manufacturer of diesel- and natural gas-powered engines began receiving customer complaints with engines produced several years earlier. The issues were localized based on usage patterns and were not detected by the companies existing failure trend detection capability. This increase in failure rates lead to increased warranty costs and decreased customer satisfaction.

COMPLEXITY

- Small and discrete changes in failure trends are difficult to detect quickly
- Many customer segments with a multitude of usage patterns
- A mobile installed base with ever changing environmental conditions
- An extremely complex interaction between expected wear out, planned maintenance, breakdown and failure reporting

RESOLUTION

Connect data through an Early Failure Detection program

- Integrated visibility of installed base attributes, observed failures and future likelihood of failure
- Consolidation of sales data and configuration including distribution channels

Reveal

- Granular forensic analytics, providing failures by model, platform, age and end use
- Predictive failure model based on lifecycle
- Automated alerts sent to appropriate quality manager and reliability engineer

Transform

- Transformed the way failure trends are analyzed for anomalies
- Sent failure trend feedback from service to engineering and quality
- Reduced uncertainty for spares planning and warranty reserves

WHY ENTERCOMS

- Connected and cleansed 7 years worth of data, not previously possible
- Immediate insights into failure trends as a combination of multiple attributes across manufacturing, equipment configuration and customer usage
- Domain specific expertise enabling rapid development of required analytics model

IMPACT

- Processed 4M+ customer claims spanning 7 years
- 45% faster detection of failure trends
- 15% reduction in warranty costs
- Increased accuracy of spares planning & reliability of warranty reserves