**latentview**

Actionable Insights • Accurate Decisions

## 35% Reduction in Warranty Costs using IoT Data

**Industry:** Automobile

**Category:** Consumer Analytics

**Warranty costs reduced by 35% through customer behavioral segmentation analysis leveraging real-time IoT data from connected vehicles. LatentView developed a scalable, self-serving analytics platform that helped the client understand usage patterns for their products and test product-related hypotheses.**

### The Business Challenge

Costs incurred due to warranty claims had a negative impact of almost 2.5% on the bottom line. The client wanted to minimize warranty claims by correlating vehicle usage with expensive and severe claims. Vehicle usage could be analysed by identifying different driving styles and correlating them with warranty claims. The client turned to LatentView to help them better understand vehicle usage patterns and test various product related hypotheses based on real-time data from connected cars.

Prior to partnering with LatentView, the client, much like its peers, was using servicing history, warranty claims and make/model to offer warranty plans. The result was a basic warranty offering which didn't take into account how the driver really used the car, often leading to high-level of unexpected faults in cars.

## The Solution

Driving styles were identified based on vehicle usage and historical warranty claims which were then used to accurately predict future claims for each driving style. LatentView Analytics developed a self-service analytics platform that could be used to identify vehicle usage patterns by providing data from connected vehicles. Using the platform, one can visualize the different driving styles and understand the top warranty claims for each style.

The analytics platform curates live data transmitted from individual units into a usable format and integrates it to existing data banks for a more detailed understanding of the performance of the overall community. LatentView Analytics performed advanced data processing to ensure that incomplete data collection, if any, were properly extrapolated to contribute to the overall analysis. Finally, once the data was ready, advanced clustering techniques, an integral component of Machine Learning, was applied to deliver the results thereby reducing the processing time from hours to minutes.

The solution runs on a self-organizing machine learning algorithm that can process data, develop, model and visualize results for customized settings and definitions. The solution is backed by a powerful parallel computing infrastructure that runs the complete process in less than three minutes. LatentView Analytics used Design Thinking visualization approach that allows executives to focus on financial improvement opportunities for key segments based on usage.

LatentView Analytics followed a business case scenario where the self-serve solution prototype was developed and delivered within 100 days for approval. This approach allowed the business stakeholders to accurately assess the potential benefits before release.

## The Results

LatentView Analytics identified key driving styles based on vehicle data and compare them with warranty claims data. This helped reduce warranty costs by 35% due to proactive 'drive right' messaging communicated to at-risk drivers.

The analytics platform has enabled citizen data scientists to independently test hypothesis at scale and generate multiple strategic and tactical insights. This enables market driven product innovations.

The solution helped the client improve predictive maintenance resulting in enhanced customer satisfaction due to cost savings.

The platform delivered strategic insights to better understand "future mobility" metrics, such as the comparison of product usage in electric and hybrid cars vs. conventional vehicles, usage in mature vs. developing markets and preventive maintenance and personalized services.