CASE STUDY | Customer Analytics

LatentView
Actionable Insights • Accurate Decisions

Reduction in Warranty Costs using IoT Data

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

Business Challenge

Costs incurred due to warranty claims had a negative impact on the bottom line. The client was looking to minimize warranty claims by correlating vehicle usage/ driving styles with expensive and severe claims using IoT data from Vehicles. Major challenge was to derive relevant and actionable insights by merging enormous amount of complex data across different dimensions.

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.

Winner -
NASSCOM Artificial Intelligence Game Changer Awards 2018

Solution

LatentView Analytics developed a scalable and self-service code-free AI platform for analytics on connected vehicles that could be used to identify vehicle usage patterns by providing data from these vehicles. The analytics platform curates IoT data from cars into a usable format and integrates it to existing data banks for a more detailed understanding of the performance of the overall community. The platform empowers SMEs/business users to visualize different driving styles and understand top warranty claims for each style. The information is then used to accurately predict future claims for each driving style.

LatentView Analytics performed advanced data processing to ensure that incomplete data collection, if any, was 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 AI platform is powered by:

- Self-organizing machine learning algorithms that can process data, develop, and model for customized settings and definitions
- A responsive and interactive simplified user interface masking the complexity of the application
- A powerful parallel computing infrastructure that has the capability to ingest large volumes of data

LatentView Analytics followed a business case scenario where the self-serve solution was developed and delivered under six months.

Technology

ML Techniques: Neural Networks, Random Forests, Clustering

ML Libraries: Apache Spark, H2O, Tensor Flow

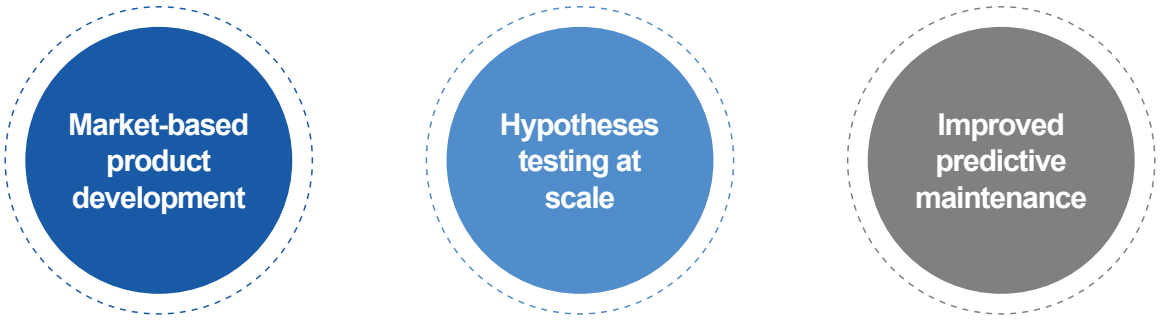
Distributed Processing: Apache Spark

Platforms: Play Framework, ReactJS

Programming Languages: Scala, Javascript

Results

- Significant cost savings observed in the warranty claims due to proactive drive-right messaging and preventive maintenance
- 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.
- Improved predictive maintenance resulting in enhanced customer satisfaction.



About: LatentView Analytics

LatentView Analytics is a leading global data and analytics service provider helping companies turn data into actionable insights to gain competitive advantage. As a trusted analytics partner to the world's most recognized brands, LatentView solutions provide a 360-degree view of the digital consumer, fuel machine learning capabilities and support artificial intelligence initiatives. LatentView's success is driven by a commitment to deliver unrivalled analytics solutions that enable Fortune 500 companies in the retail, CPG, BFSI, high tech, healthcare and other sectors to predict new revenue streams, anticipate product trends, improve customer retention, optimize investment decisions and turn unstructured data into a valuable business asset. LatentView has offices in Princeton, N.J., San Jose, Calif., London, Singapore and Chennai, India with more than 600 employees globally.

For more information, please visit www.latentview.com or follow us on LinkedIn.