Execution of Big Data Analytics in Automotive Industry using Hortonworks Sandbox

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Abstract

The market landscape has undergone dramatic change because of globalization, shifting marketing conditions, cost pressure, increased competition, and volatility. Transforming the operation of businesses has been possible because of the astonishing speed at which technology has witnessed the change. The automotive industry is on the edge of a revolution. The increased customer expectations, changing ownership, self-driving vehicles and much more have led to the transformation of automobiles, applications, and services from artificial intelligence, sensors, RFID to big data analysis. Large automobiles industries have been emphasizing the collection of data to gain insight into customer's expectations, preferences, and budgets alongside competitor's policies. Statistical methods can be applied to historical data, which has been gathered from various authentic sources and can be used to identify the impact of fixed and variable marketing investments and support automakers to come up with a more effective, precise, and efficient approach to target customers. Proper analysis of supply chain data can disclose the weak links in the chain enabling to adopt timely countermeasures to minimize the adverse effects. In order to fully gain benefit from analytics, the collaboration of a detailed set of capabilities responsible for intersecting and integrating with multiple functions and teams across the business is required. The effective role played by big data analysis in the automobile industry has also been expanded in the research paper. The research paper discusses the scope and challenges of big data. The paper also elaborates on the working technology behind the concept of big data. The paper illustrates the working of MapReduce technology that executes in the back end and is responsible for performing data mining.

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