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Github Link: <https://github.com/sneha026/Electric-Vehicle-Market-Segmentation/blob/main/Electric-Vehicle-Market-Segmentation.ipynb>

### *Abstract*

This project presents a comprehensive analysis of India's electric vehicle market, focusing on segmentation derived from sales data, customer reviews, and technical specifications. The study highlights the robust growth trajectory of India's two-wheeler market, establishing it as a primary revenue source. Utilizing behavioural variables from customer reviews, a rigorous market segmentation analysis was conducted employing the standard k-means algorithm. The analysis effectively partitioned the market into four distinct segments.

Segment 1 emerges as the cornerstone of our strategy, constituting a substantial 39% of the consumer base. This segment not only represents a substantial market opportunity but also serves as the optimal target for our venture. The analysis guides the recommendation of specific electric two-wheeler technical specifications tailored to meet the preferences of Segment 1 consumers.

The recommended specifications, seamlessly integrating with the demands of this segment, are pivotal to our approach. Moreover, the price range aligns closely with the median values, ensuring affordability and competitiveness. This strategic alignment with Segment 1, identified as the potential early market customer base, positions our venture optimally within India's electric vehicle landscape.

## **1.0 Introduction**

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