



Market Segmentation Analysis of Electrical Vehicle Market in India

PROBLEM STATEMENT

Market segmentation becomes a crucial tool for evolving transportation technology such as electric vehicles (EVs) in emerging markets to explore and implement for extensive adoption. EVs adoption is expected to grow phenomenally in near future as low emission and low operating cost vehicle, and thus, it drives a considerable amount of forthcoming academic research curiosity. The main aim of this study is to explore and identify distinct sets of potential buyer segments for EVs based on psychographic, behavioural, and socio-economic characterization by employing an integrated research framework of 'perceived benefits-attitude-intention'.

Conducting a market segmentation analysis for the electric vehicle market in India is crucial for identifying target customer segments and understanding their specific needs and preferences. Here are some steps to conduct a market segmentation analysis for the electric vehicle market in India:

STEPS INVOLVED IN THE SEGMENTATION PROCESS: -

Gather data: Collect data on the Indian electric vehicle market, including sales figures, customer demographics, and other relevant information. Conduct surveys, focus groups, and interviews to gather data on customer needs, preferences, and behaviours.

Identify customer segments: Analyse the data collected to identify different customer segments. This can be done based on demographics, psychographics, and behaviour. For example, customer segments can be based on income, age, lifestyle, driving habits, and environmental concerns.

Evaluate segment attractiveness: Evaluate each segment's size, growth potential, and profitability to determine which segments are most attractive for the company to target.

Develop segment profiles: Develop detailed profiles of each segment, including their needs, preferences, and buying behaviour. This can be done by analysing survey data, customer feedback, and industry reports.

Target specific segments: Develop targeted marketing strategies for each segment, tailoring product offerings and promotional campaigns to meet their specific needs and preferences.

By conducting a market segmentation analysis, companies in the electric vehicle market can identify the most profitable customer segments and develop effective marketing strategies and products that cater to their specific needs. This will ultimately help companies succeed in the highly competitive electric vehicle market in India.

The following are the suggested Motor Third Party Premium rates for FY 2022-23 for various vehicle categories/subcategories, which will take effect on April 1, 2022.

Category	Vehicle Type	Rates (Rs)
	Private Cars	
	Not exceeding 1000 cc	2,094
	Exceeding 1000 cc but not exceeding 1500 cc	3,416
	Exceeding 1500 cc	7,897
	Two Wheelers	
	Not exceeding 75 cc	538
	Exceeding 75 cc but not exceeding 150 cc	714
	Exceeding 150 cc but not exceeding 350 cc	1,366
	Exceeding 350 cc	2,804

Category of Vehicle	Rates (Rs.)
New Private Car - Three year single premium	
Not exceeding 1000 cc	6,521
Exceeding 1000 cc but not exceeding 1500 cc	10,640
Exceeding 1500 cc	24,596
New Two Wheeler - Five year single premium	
Not exceeding 75 cc	2,901
Exceeding 75 cc but not exceeding 150 cc	3,851
Exceeding 150 cc but not exceeding 350 cc	7,365
Exceeding 350 cc	15,117

Long term rates for electric vehicles - Private Cars and Two wheelers:

Category of Vehicle	Rates (Rs.)
New Private Car - Three year single premium	
Not exceeding 30 KW	5,543
Exceeding 30 KW but not exceeding 65 KW	9,044
Exceeding 65 KW	20,907
New Two Wheeler - Five year single premium	
Not exceeding 3 KW	2,466
Exceeding 3 KW but not exceeding 7 KW	3,273
Exceeding 7 KW but not exceeding 16 KW	6,260
Exceeding 16 KW	12,849

Source: IRDAI

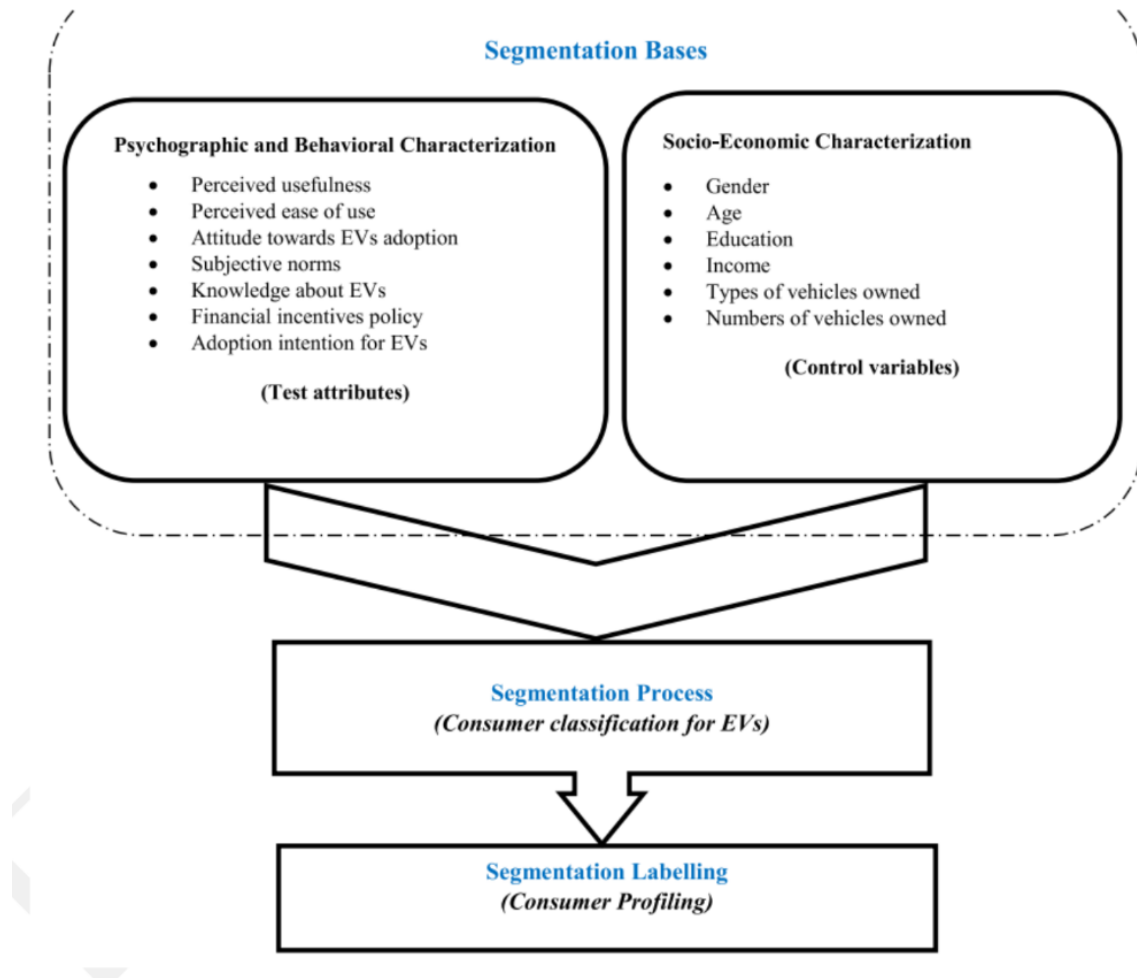
EV sales in India hit 1.16 million units in FY23.

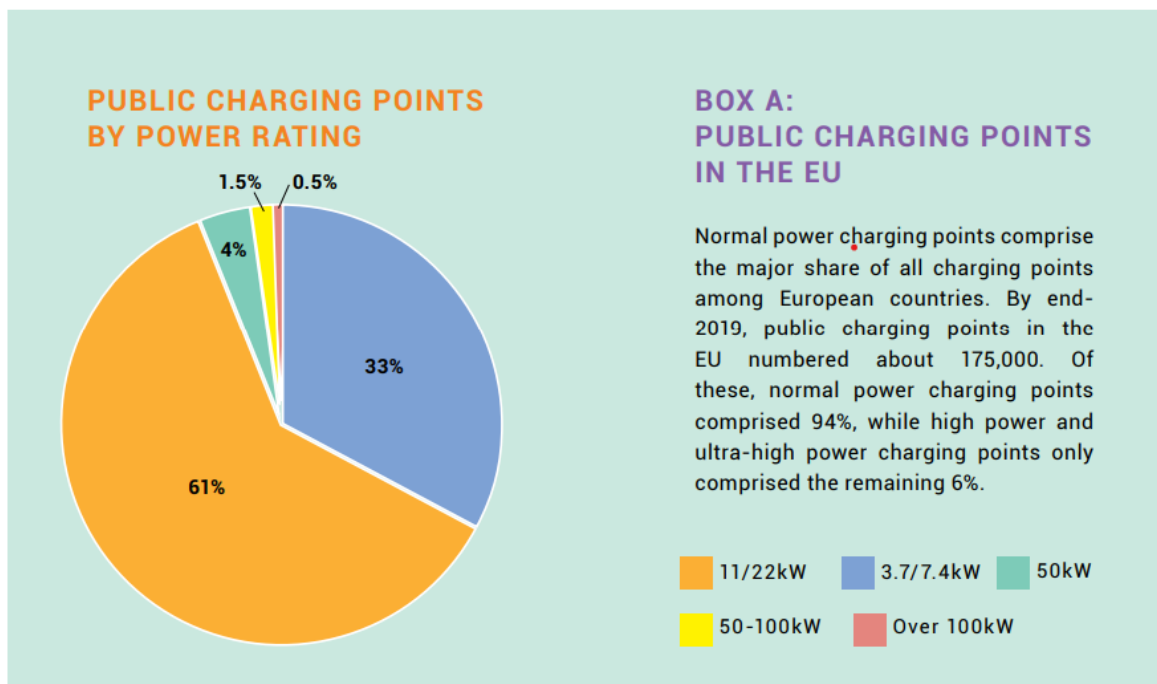
With a significant 154% year-over-year increase from FY22's 458,746 units, FY23' .

Read more at:

<https://auto.economictimes.indiatimes.com/news/industry/ev-sales-in-india-hit-1-16-million-units-in-fy23/99152329>

Market Segmentation process for electric vehicles





DATASET LINK: - <https://github.com/Chaganti-Reddy/EVMarket-India>

In addition to the factors mentioned, it's also important for companies to consider the demographics of the target market when assessing market size. For instance, urban areas with high population densities and a growing middle class may represent a significant opportunity for EV adoption due to factors such as higher pollution levels and greater access to charging infrastructure. On the other hand, rural areas with lower population densities and limited infrastructure may present greater challenges in terms of market size and growth potential.

Furthermore, it's important for companies to consider the total cost of ownership (TCO) when developing pricing strategies for EVs. TCO includes factors such as fuel and maintenance costs, as well as the initial purchase price, and can often make EVs more cost-effective over the long term compared to ICE vehicles. By highlighting the TCO benefits of EVs in their pricing strategies, companies can appeal to cost-conscious consumers who may be hesitant to pay a premium for the initial purchase price.

In summary, pricing and market sizing are two closely related factors that are critical for the success of the EV market in India. By developing effective pricing strategies that balance revenue and profit objectives with the need to encourage adoption, and by understanding the potential size and growth trajectory of the market, companies can position themselves for long-term success in the rapidly evolving EV landscape.

