International Journal of Scientific Research in Engineering and Management (IJSREM)
Volume: 06 Issue: 11 | November - 2022 Impact Factor: 7.185 ISSN: 2582-3930

A MARKET SHARE ANALYSIS OF ELECTRIC BIKE – A CASE STUDY

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ABSTRACT:

The increased use of non-renewable fossil fuels brings with it environmental problems such as: the "greenhouse effect", health problems for city delivers and concern over the stability of fuel supply. To move away from this dependence on oil, a vast amount of money is being spent on the development of electrical vehicles (EVs) that may be produced. The aim is to investigate how consumers learned about electric bikes, how commercials influenced when making purchasing decisions and post sales experience and increase the market share. The consumers learned about electric bikes online, with very few marketing appearing in newspapers or on television. majority of consumers were discovered to be influenced by commercials when making purchasing decisions. majority of clients were discovered to be dissatisfied with the after-sales experience.

Keywords: Awareness; Electric Bikes, Electric Scooters; Electric Bikes; E-Bikes;

INTRODUCTION

Travel has advanced significantly from the days of walking to the different modes of contemporary transportation in the globalised globe. In the past, people used to walk wherever they went. Back then, people used to travel by using natural resources without harming the environment. The world's modes of transportation

have completely changed with the march of time. The development of transportation has advanced dramatically to this point. With scientific advancement, the amount of time it took to travel has significantly decreased from ancient times. The introduction of transportation has significantly shortened travel distances. The advancements in transportation technology are continuously being made by science. the era of the beast

In the twenty-first century, environmental friendliness has become increasingly important. The ability of nature to absorb the produced toxins will be weakened by the steady and geometric increase in the flow of cars at the global level. The study anticipates making an assessment preference shifts in favour of electric engines. The India e-bike market was valued at USD 1.14 million in 2021, and it is expected to reach USD 2.31 million by 2027, projecting a CAGR of 12.69% during the forecast period (2022-2027).

In recent years, there has been a rise in the demand for e-bikes in India. However, during and after the COVID-19 pandemic, the e-bike industry, like most others, saw a decrease due to a total shutdown of manufacturing sites, tight COVID-19 criteria to be followed during production, interruption of the supply chain, and other factors.

The growing customer demand for electric bikes for recreational and adventurous activities and the use of e-bikes in other sectors such as logistics and rentals are propelling the electric bike market in India forward. The country's large population, along with improving last-mile logistics, is predicted to provide the e-bike market a boost throughout the forecast period.

In India, the e-bike market is still in its infancy, with several local firms offering a diverse variety of devices. The expensive cost of e-bikes on the market, however, may hinder market expansion. Customers choose scooters over e-bikes since the average price of an e-bike in India is the same as a basic scooter.

E-Bike in India

India is a significant exporter of automobiles and anticipates rapid export development in the near term. Additionally, a number of measures taken by the Indian government and significant automobile manufacturers are anticipated to position India as a global leader in the two- and four-wheeled vehicle markets by 2020.

E-BIKE

With a combined total of 3.49 million units sold in the passenger and commercial vehicle categories in 2020, India was the fifth-largest auto market. In 2019, it was the seventh-largest producer of commercial cars. Due to a growing middle class and a young population, the two-wheeler category currently holds the majority of the

market share in terms of volume. Further supporting the sector's expansion was the corporations' rising interest in investigating rural markets. A power connection can be used to quickly charge an EV's battery. A number of Direct-drive and geared motor units are both used in the various direct-drive and geared electric powered bicycle variants that are feasible. Almost any pedal cycle can be equipped with an electric power-assist system employing chain drive, belt drive, hub motors, or friction drive. The legal classifications that are accessible have an impact on the power levels of motors used, which are frequently restricted to under 700 watts.

Rechargeable batteries, electric motors, and a kind of control are all used in electric bicycles. Although it can be as straightforward as an on/off switch, electronic pulse width modulation controls are more common. The solar charging stations that came with the electric bicycles created in Switzerland in the late 1980s for the Tour de Sol solar vehicle race were later installed to roofs and connected so as to feed into the electrical mains. [13] Following that, the bicycles were powered by the mains, as is customary nowadays. Lead-acid, NiCd, NiMH, and Li-ion batteries are among the battery types now in use.

Electric bicycle operation requires little energy, but battery replacement can be expensive. Long-term financial benefits come from using an electric bicycle instead of a car to get to work or the store. An electric bike can be charged using solar energy.

Future growth of E-Bikes

The market for electric bikes in India was worth INR 72.34 million in FY 2020. It is anticipated that between 2021 and 2027, it will increase at a compound annual growth rate (CAGR) of 11.16 percent, reaching INR 143.34 Million.

India is just starting to make the switch to electric automobiles. Increased adoption of electric bikes will spur market expansion due to worries about pollution and other environmental issues, as well as the reduced operating costs of electric vehicles compared to those powered by fuel.

The government is pushing the use of electric vehicles, therefore the market for electric motorcycles in India is anticipated to expand in the years to come. Running an electric bike costs roughly INR 10 for 70 km, whereas operating a traditional cycle for the same distance costs at least INR 102.

Scope of the Report

The India e-bike market has been segmented into propulsion type, application, and market share of major e-bike producer companies in India.

By propulsion type, the market has been segmented into pedal-assisted and throttle-assisted.

By application type, the market has been segmented into city/urban and cargo.

The report also covers the market size and forecasts for e-bikes in India. For each segment, the market forecasting and sizing have been done on the basis of value (USD million).

Propulsion Type	Pedal-assisted Throttle-assisted (Power-on-demand)
Application Type	City/Urban Cargo

Growing Demand for Eco-friendly Transportation

The demand for e-bikes in Tier 1 cities is fast-growing, with sales in India growing at a double-digit yearly pace over the previous several years. E-bikes are becoming increasingly popular in cities like Delhi, Mumbai, Pune, and Bangalore. Because e-bikes are more expensive than traditional bicycles, some businesses have established financing and EMI alternatives.

During the pandemic, the firm Go Zero entered the market. With its website and other e-commerce channels, it focuses more on online shopping and provides no-cost EMI options. Apart from being considered a cleaner and greener means of short-distance transportation, e-bikes have a wide range of applications and sectors in India.

E-bike makers are focusing on improving the entire user interface by creating and developing e-bikes that can interact with the riders' smartphones and deliver real-time information on the speed and battery level. Customers are becoming more interested in e-bikes as a result of this. The market for electric bikes in India is positioned to develop fast throughout the forecast period, with an increasing number of companies entering the market and increased demand for e-bikes in last-mile deliveries.

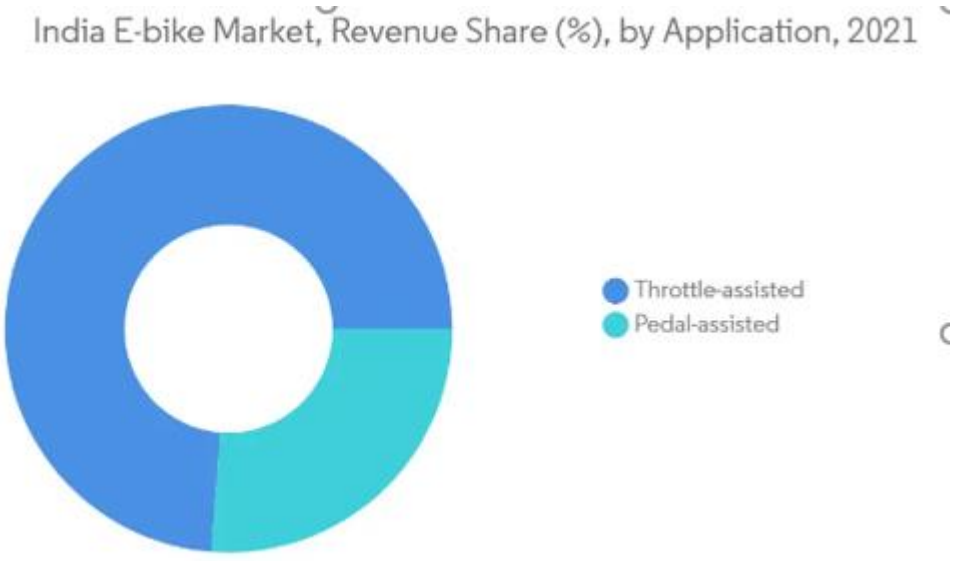
E-bikes, especially pedelecs, are proving to be the ideal mode of transportation in the future. Moreover, they are also a great mode of transportation, especially for recreational activities, as they offer the fun of cycling, combined with the suitability of an automobile. Furthermore, these bikes allow consumers to navigate through rough terrains, which are otherwise difficult to navigate without an electric motor. These factors are making e-bikes popular in India.

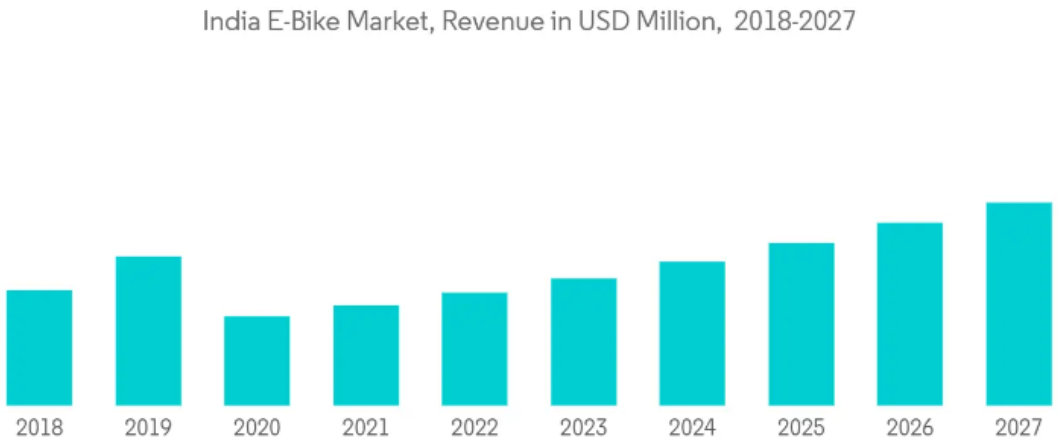
The demand for e-bikes in India has increased over the last few years. However, during and post the COVID-19 pandemic, along with most industries, e-bikes also witnessed a decline due to the complete shutdown of manufacturing sites, strict COVID-19 guidelines to be followed while manufacturing, and disruption of supply chains, among others.

Many startups have started selling electric bikes in India. Since the demand for e-bikes has increased across the nation over the last few years, manufacturers are planning to expand their facilities to target markets. Leading world manufacturers have also entered the Indian market to capture the growing market demand.

For instance, Alpha Vector registered a massive 300% increase in revenue, growing from INR 50 crore to INR 200 crore in ten months (Apr-Jan 2020). The company has announced it is working toward INR 300 crore revenue. As a part of this strategy, the company started its sales online, and it expects to see an increase in online customers by 25-30% by the end of March 2021.

Growing demand for eco-friendly transportation, an increase in electric bike sales, and support in the form of government initiatives are expected to drive the India e-bike market during the forecast period.





The India e-bike market is moderately fragmented, with the presence of a number of startups and companies such as Hero Cycles, GoZero, Being Human, and Giant Bicycles Co. Ltd. The market is highly driven by factors like advanced battery technology, lightweight materials, growing investment in R&D projects, etc. To provide a more convenient experience to the customers, major global e-bike manufacturers are expanding their market reach in India, and local companies are introducing new models in the market. Also, makers are trying new marketing strategies to lure customers. For instance,

In February 2022, Hero Cycles Ltd opened a Lectro's experience center. The experience center will meet the needs of customers while also displaying the company's products. Buyers will be able to compare e-cycles based on their functions. It covers commuting, exercise, and adventure, among other things. Customers may explore and test different models of Hero Lectro's e-cycles at the store's test-ride section.

- Major players in market are Trek bikes, Being Human, Gozero Mobility and Hero Cycles Mobility In December 2021, Firefox Bikes announced plans to expand its e-bike portfolio in India to increase the localization of e-bike production. Firefox hopes to expand its customer base and capitalize on the growing demand for entry-level premium bikes with this venture.
- In August 2021, Hero Lectro Cargo (HLC) and Swiggy, an on-demand delivery platform, partnered to pilot the deployment of cargo e-bikes for the use case of last-mile food delivery in Hyderabad with Hero Lectro WINN, wherein the delivery partners will be making the food deliveries on the cargo e-bikes.

- In June 2021, GoZero Mobility, a British electric bicycle and activewear manufacturer, announced a roadside assistance program (RSA) for its customers in India. This comes on the back of an announcement of investing GBP 17 million in India and the United Kingdom to expand its footprint.
- In May 2021, Hero Lectro announced the launch of its first purpose-built cargo vehicle Hero Lectro WINN, an e-cycle designed specially to address the evolving needs of last mile-e-commerce delivery in India. The first of its kind cargo vehicle to hit the Indian market will soon be supplemented by a three-wheeled cargo vehicle.
- In January 2021, GoZero Mobility launched a new line of performance e-bikes in India with three models – the Skellig, Skellig Lite, and Skellig Pro. Skellig and Skellig Lite have a maximum speed of 25 kmph and provide a range of 25 km on a single charge. The bikes come with a 210-watt hours lithium battery pack and 250-watt drive motor. With these above mentioned technicalities the e-bikes companies how can they create awareness and change the perception of customers

    - It is necessary to raise consumer awareness of electric bikes and their advantages.
    - Newspaper and television advertisements are scarce. Therefore, since these Medias reach a broader audience, the maximum number of adverts must be placed there.
    - In order to increase sales, the price of electric motorcycles needs to be reduced. This can be done by using advanced technology and conducting mass productions, or by providing certain price reductions or offers.
    - To better serve consumers' problems and requirements as they arise, more service centers must be built, at the very least in important locations.
    - Since the majority of people like high speed, the speed of electric bikes needs to be increased in order to boost sales.
    - Major urban areas need to be covered by more dealers, and the distribution network needs to be strengthened.
    - Increased promotional efforts are necessary to raise awareness and boost sales. In order to draw in more young people, it should be presented at vehicle exhibitions, and college students should be given special discounts.
    - The majority of buyers base their decisions on aesthetics, so it is important to make electric bikes more alluring.

CONCLUSION

According to the report Consumers are unaware of electric motorcycles. Therefore, a variety of promotional actions must be conducted to raise awareness.

The study also determined and assessed how consumers perceived key aspects of electric bikes. The findings of this study indicate that that factor has an impact on consumers' perceptions in a way that is both good and unfavorable.

Since majority of the respondents here weigh price and mileage when buying a bike, there is a large market for electric bikes in the two-wheeler industry. But the main elements influencing the sales of electric bikes are their battery performance, speed, and aesthetics.

The report describes the client views that are prevalent and offers suggestions for raising awareness through marketing campaigns. The proposals can be used by the businesses to accomplish the aforementioned goals.

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