THINK INDIA JOURNAL

ISSN:0971-1260
Vol-22-Special Issue-18-December-2019

Consumer Awareness And Preference Towards Buying Behavior Of Electric Two Wheelers In Urban And Rural Areas

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Abstract:

Major cause of environmental pollution is from tailpipe emission from automobiles and the substitute for Internal Combustion engine is EVs. This paper discusses about the consumer preference towards EVs. It contains three parts; first deals with the consumer awareness among urban and rural areas, the second deals with the customer preference for EVs, and the third deals with factors influencing the buying behavior. The finding shows that there has been a steady increase in the purchase of EVs since introduced in India, but there is only less awareness in rural areas as compared to that of urban areas. There is a huge requirement for infrastructural establishment, government support, technological support and industrial support, with suitable policy changes in order to increase the sales of EVs in the urban and rural areas.

Keywords: Tailpipe emission, infrastructure, consumer awareness, consumer preference.

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ISSN:0971-1260
Vol-22-Special Issue-18-December-2019

Introduction:

India is one of the fast developing countries in the economic status. Major populations are using fossil fuel for two wheelers, cars and other vehicle for transportation but these vehicles are emitting Green House Gases which causes environmental pollution. Now, people are ready to change their mind to buy Electric vehicles by knowing their benefits .

In 2013, Government of India has launched National Electric Manufacturing Mission Plan,2020.Under this mission plan, it has allocated budget (2019-2020)for the production of more electric vehicle and announced incentives to the consumers. Now electric vehicle have come to the market and there is a change of perception of people for buying electric vehicles by availing of government financial incentives. Infrastructure facilities will be increased for the production of more electric vehicles in future. Now-a-days people have more willingness to buy the electric two wheeler, because of small manageable size, low cost, availability of loans and Government subsidies. These are all features to induce the customers to purchase the product. Electric two wheeler has totiedup with CSC E-Governance to Eco friendly mobility to the consumers in urban and rural areas.

Review Of Literature:

Johnneskester et al,.(2019), have stated that EVs are used partly for self sufficiently in rural areas that acknowledge individual choice and circumstance for making final purchase decision. They add that a skewed urban popularity will keep people to look for EVs, as a viable option .

Jorgenwenig et al.,(2019),have suggested that there should be more infrastructure development in order to bring EVs as an alternate for IC engines and policies are to be made appropriate infrastructure.

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ISSN:0971-1260
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Zhane li Amir Khan, Pour Jinchanjong (2019),have states that for EVs public charging infrastructure is necessary as an alternate to the home charging in the densely population areas.It may vary fromcountry to country based upon the density of population and a transfer from IC to EVs require huge infrastructure challenges.

Sonia Almedia Antonio, Cardojomaiqutes, Josealbertofuintas(2018)suggests that policies should be tailored to each and every individual technology of EVs and the technological processes have to increase the of electric vehicles and electric hybrid vehicles.

Need For Study:

Consumers should be educated with the environmental consciousness. Electric two wheelers are free from pollution and zero maintenance cost. Now, EVs base come to market and there is a change of perception of people to buy Electric vehicles. Government policies are more favorable to the consumers by offering incentives.

Objectives of Study:

- To create awareness about the use of electric two wheelers among the consumers in urban and rural areas.
- To know the consumer preference towards the electric two wheelers.
- To study the challenges of selling electric two wheelers in urban and rural areas.
- To study the Government initiatives for promoting the E-vehicles.

Data collection

Data collected for this study were based on the secondary sources such as books, journals and website.

Study and Analysis:

India is one of the second largest populated countries in the world consisting of diverse groups of people. Indian middle class people are the largest consumers of automobiles especially two wheelers. Urban and rural area people are using two wheelers, cars and public transports. It is very difficult for them to reach their work places within a stipulated time due to heavy rush. In

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ISSN:0971-1260
Vol-22-Special Issue-18-December-2019

order to avoid heavy rush in fuel filling stations, they are preferring electric two wheelers for transport (Table.1)

Table 1.Gradual increase in buying EVs from2014-2015 to 2018-2019

Financial year	No.of units sold
2014-2015	**14,378**
2015-2016	**16,456**
2016-2017	**22,867**
2017-2018	**30,289**
2018-2019	**54,000**

Source: ENINCON CONSULTANCY ,auto care india

During the financial year 2014-2015 it was found that 14,378 units have been sold which is the initial stage for the sales of electric two wheelers in India. During the succeeding financial years, there was gradual increase in the sales of electric two wheelers. In 201830,289units have been sold with Government aid (ENINCON RESEARCH).

Future Challenges for EVs:

- Insufficient infrastructure for charging facilities
- Availability of battery imports
- Availability of spare parts and import components
- Incentives to local manufactures
- Currently High Price of EVs
- Lack of high performance
- Need for infrastructure in electricity supply across India
- Need for infrastructure in maintenance and repair

Factors influencing the EVs

- Environmental concern
- Psychology benefit
- Health benefit

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ISSN:0971-1260
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Environmental concern:

Environmental concern deals with climate change issue awareness of clean energy and energy conservation. It is defined as the degree to which awareness is made among the people regarding the environment and people's willingness to contribute personally to the solution. Previous studies have indicated consumer environmental concern, impact on purchase decision towards environmentally safe products. Technological advancement and people's environmental concern have now made consumers to buy electric two wheelers.

Psychological benefits:

Factors like attitude, perceptions and social acceptance arethe psychological factors play an important role in the consumer acceptance of electric vehicles, considering the effects of carbon dioxide emission and fossil reserve depletion.

Health benefits:

As the roads are perennially noisy with the smoky vehicles and unnecessary sounds and squabble of people health hazards to human beings such as asthma, eye burning, eye watering, skin allergy, lungs and heart disease are expected.Moreover, the myriad automobiles release harmful gases, into the air, causing air pollution and the zero exhaust emission will provide with greater urban and rural health benefits, with the use of electric two wheelers.

Conclusion:

Rural consumers are less knowledge able about the use of electrical two wheelers than the urban consumers. To create awareness with regard to environmental consciousness and psychological behavior of buyers for buying more electrical two wheelers campaigns have to be arranged in rural areas, as customer satisfaction is one of the key factors to make a profitable and sustainable relationship with the rural consumers. Any product introduced into the market should have quality and value because rural consumers are price sensitive as they think about quality ,performance, brand and other critical aspects. Government incentives to purchasers, dealers and manufacturers are needed to promote the buying behavior of rural consumers, as the rural markets are expanding now and the focus has to shift to attract the rural consumers.

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ISSN:0971-1260
Vol-22-Special Issue-18-December-2019

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