
A synthesis of emotional quotient in dealer management in the electric car distribution channel in Bangalore

Dr. Guru Basava Aradhya

Associate Professor, Department of Marketing & IB, ISBR Business School,
Bangalore
guru@isbr.in

Mr Madan Gowda KJ

Assistant Professor & arch Associate, ISBR Business School, Bangalore
madan.g@isbr.in

Ms. Deblina Majumder

PGDM student, ISBR Business School, Bangalore

Mr KameshGurao

PGDM student, ISBR Business School, Bangalore

ABSTRACT

The replacement of fossil fuel-based cars by an electric one is of paramount interest to car companies. The major challenges associated with it are not only building the required infrastructure but also educating and supporting the consumers to endure this mammoth change. The breakthrough in areas like the driving range of the electric engine, their price point, use of clean energy to manufacture batteries will decide the fate of this endeavor in near future. In this regard, the car dealers can play a very important role to educate and support the customers to adopt this change. In this project, we have collected feedback from 77 electric car dealers of Bengaluru, regarding the emotional quotient in dealer management. The primary goal of this research is to examine customer perceptions and purchase intentions for electric automobiles in Bengaluru, as well as how the customer-dealership connection influences the purchasing process. This study shows that customers are ready to make this transition and the respective car dealer are also doing their part to make this journey a smooth one, also shows us as a customer, what features a dealer need to add to the dealership business to build a pleasant a dealer- customer relationship.

Keywords:EQ, electric cars, dealership, customer perception

INTRODUCTION

The third-largest road network in the world is found in India. In India, road travel appeared to be the main mode of transportation, with over 60% of the population commuting by personal or shared vehicles. (2020, Statista). India's shift to electric mobility not only provides an opportunity to increase efficiency and modernize the transportation sector but also tackles several pressing concerns. With the adoption of electric mobility, worries about energy

security and a rising current account deficit (CAD) due to rising fossil fuel imports can be addressed. India is a power surplus country, and as a result of decreased capacity use, plant load factors are currently lower.

According to conservative estimates, demand from electric cars (EV) might significantly enhance the utilization factor of underutilized power plants, as EV charging patterns are thought to correspond with power demand during the country's non-peak hours.

In Bangalore, despite the growth of electric vehicles, Karnataka lags in subsidizing consumers according to officials in the BESCO, 18,000 electric vehicles are operating in the city including two, three, and four-wheelers.

The Pandemic brought in a dramatic change in dealers' behaviors toward EV, People are adopting EV as they are more caring for the environment than before the pandemic. Dealers have to face different kinds of questions as customers are not that aware of EV, they want to adopt EV but they are not that aware of its benefits of it.

The government recently introduces the E-Amrit website where they are giving information about EV cars and dealers in the city. The electric vehicle industry in India is picking pace with 100% FDI possible, new manufacturing hubs, and increased push to improve charging infrastructure. Federal subsidies and policy favoring deeper discounts for Indian-made electric two-wheelers as well as a boost for localized ACC battery storage production are other growth drivers for the Indian EV industry. Moreover, in September 2021, a production-linked incentive scheme for the automotive sector was approved by Cabinet to boost the manufacturing of electric vehicles and hydrogen fuel cell vehicles. India reported sales of over 300,000 EV units in 2021.

"Electric vehicles will reduce the impact of air pollution. EVs will certainly not reduce traffic congestion, which will continue irrespective of fuel-based or electric vehicles being introduced. At least pollution from idling and slow-moving traffic can be reduced through EVs during congestion," said Mahesh Kashyap, an environmental consultant.

100% of three and four-wheeler moving goods will be encouraged to transition to electricity by 2030. Aim to set up 112 EV charging stations in Bengaluru. Focus on venture capital fund for e-mobility start-ups and creation of a secondary market for batteries. Incentives such as interest-free loans on net SGST for EV manufacturing enterprises.

This research paper will give you a deep understanding and want to add value to the emotional quotient in the dealership.

NEED OF STUDY

Understanding the need for EVs in today's world, as well as the parameters that can entice customers to purchase electric vehicles, it is very important to understand the basic mindset of both customers and dealers. As the precise amalgamation of both customer and dealer can increase the number of EV buyers, the purpose of this study is to identify the factors that influence potential customers of Electric Vehicles to make their decision.

LITERATURE REVIEW

Key Factors Influencing Consumers' Purchase of Electric Vehicles, Jui-Che Tu and Chun Yang, - Graduate School of Design, National Yunlin University of Science & Technology, Yunlin 640, Taiwan, 2019: In this case study, Jui-Che Tu and Chun Yang explained perceived usefulness, compatibility, and personal innovativeness as the sources of attitude toward

behavior, as sources of subjective norm, interpersonal and external influences; and perceived behavioral control, self-efficacy, and facilitating situations as related dimensions. Through the influence analysis conducted in this study, it was found that most of the dimensions have an impact on consumers' behavioral intention of purchasing electric vehicles. Customers must gradually accept and welcome the new trend because of the crucial position that EVs play. However, consumers often hold conservative attitudes toward innovative products due to the lack of relevant knowledge sources, which means that they would not purchase such products until these uncertainties are removed. Manufacturers should take attractive measures to meet the needs of consumers to promote the popularization of EVs in the future.

However, this research focuses entirely on private electric vehicles to look at the factors that influence people's decisions to buy new electric vehicles. Only Chinese customers had been selected as study topics due to the fact the study's scope is China's electric-powered car market.

Electric Vehicle Dealership Education & Training, Manoj K. Karwa, Montréal, Québec, Canada, 2016: This study explains that the most knowledgeable dealership included those who are experienced in electric vehicle staffing and dealership. The most engaged staff also had an EVSE to use at the dealership and the dealer principles' home. Regular use of electric vehicles enabled the dealership staff to understand the value proposition of EVs and better communicate to potential consumers. The establishment of an electrical framework has to incorporate the assistance region and front of the showroom. The overview sound region was utilized to charge the electric vehicle later assistance. Numerous clients anticipate that their electric vehicle should be charged later help, like a vehicle wash. The charging framework before the showroom ought to be significant for shoppers and other electric vehicle drivers. The framework before the showroom can be utilized as a promoting device to hold and draw in new clients.

The staff who is selling EVs should be motivated and trained to make up for lost help and support and extra an ideal opportunity for deals action. Most showrooms would esteem a chance for pay (or spiff) for electric vehicle sales. Training for showroom staff on Electric Vehicle Supply Unit (EVSE)'s should be a continuous drive. Continuous correspondence is needed for the showroom at the expense of proprietorship. This could incorporate EV motivating forces, nearby utility season of utilization programs, carpool lane access, and buyer home Level 2 charger support. Many showrooms had numerous plans of motion for the house level. projects, for example, incorporating an EVSE with every vehicle deal; turnkey establishment and EVSE; favored EVSEs with limited evaluating, or Level 1 EVSE as it were. However, this case does not explain how to increase awareness in customers for EV and how can dealers and distributors can connect in a single platform. There should be a proper arrangement to connect dealers to distributors and customers.

Integration of Electric Vehicles in the Distribution Network: A Review of PV Based Electric Vehicle Modelling, Asaad Mohammad, Ramon Zamora, and Tek Tjing Lie, Licensee MDPI, Basel, Switzerland, 2020: Electrical vehicles are the ultimate solution to cope with increasing oil prices and to face the challenge of global warming (Fossil fuel-based emission). Recently social consciousness and assessment of effective rechargeable batteries boom the adoption charge of EVs, though the rate is slow as high initial cost, battery degradation, inadequate

charging infrastructure require prior improvement. Using Renewable energy sources (RES) instead of Fossil fuel-based power generation to make these EVs environment friendly and to increase the adoption rate we need more infrastructure, like, a greater number of charging points, stable power distribution facility, driving range) to support the Electrical vehicle Industry.

Study on the Configuration of Distribution Channels for New Automobile, Ubirata Tortato & Roberto Marx, Journal of Operations and Supply Chain Management, 2010: The relationship among manufacturers and distributors tends to be intensive, together with robust exchanges of information, training, and mutual commitments. Automobiles are usually associated with high costs, brand name, prestige, and specific performance aspects. The factors that influence the structure of distribution channels are the range of customer services, social and cultural factors or consumer behavior, the legal environment, available technologies, and transaction costs.

Managing the impact of electric distribution network on rapid electric vehicle adoption, Chuck Roy, World Electric Vehicle Journal, 2012: EVs charging station management system is a much-needed invention by Siemens as the number of adoptions of EVs needs more power back up. And a well systematic envisioned solution that can control the proper distribution of electricity without power quality issues and with proper supervision could be the best way to step forward into the new Era of Electric Vehicle.

OBJECTIVES: -

- To study the factors of EQ, that influence dealer of e-cars.
- To examine the relationship among the factors EQ that influences the dealer of e-car channels.
- To synthesis of EQ factors effectiveness of channel of distribution in the of e-cars in Bangalore.

METHODOLOGY

Descriptive research methodology is used. Primary data of a sample population of 50 is collected using an online questionnaire. The Chi-square test is used to test the hypothesis.

Descriptive Analysis:

Good value-added service:

From this analysis, we can state that the brand image is the most influencing factor for EQ in dealership management. We found out that customers value good value-added service, communication strategy, free trials, and discount and competitive pricing the most. Brand image is the most important driver of brand equity, which refers to a consumer's overall view and feeling about a brand and has an impact on their behavior. Despite changes in consumers' lifestyles and information processing methods, the brand image continues to be the most influential element in purchasing decisions.

Free Servicing:

In India, electric cars are still more expensive than in many wealthy countries. To aid this, the Indian government has been gradually adopting steps to encourage the adoption of electric vehicles in the country by providing different subsidies and incentives to both manufacturers and car customers. The benefits differ depending on which Indian state you live in, and new rebates are introduced as electric car regulations change, further perplexing EV customers. To

attract customers, dealers need to post some attractive offers in which free servicing is the most influential of all.

Brand Value:

As responses explain 90.5% of people say brand matters in all aspects to buy an EV in Bengaluru. In India, about 90% of people are willing to pay a premium for an electric vehicle as a survey by Economic Times. In comparison to existing and future ICE owners who intend to buy a car, existing and future EV owners who intend to buy a car have a relatively larger preference for digital channels.

Most Influencing factors while choosing EV:

In general, considerations such as performance, cost, and charging infrastructure deter consumers from purchasing electric vehicles. Consumers' inclination to acquire electric vehicles is positively influenced by government legislation, societal influence, environmental consciousness, Car color preference, Day of delivery, features in the car, and charging stations.

Emotional Quotient of EV:

Electric vehicles (EVs) are associated with a variety of symbols, identities, and ideologies, and are seen as much more than just a mode of transportation. The influence of financial incentives and numerous psychological aspects on the EV buying decision has been studied in the research paper. We underline that the success of EVs in gaining public adoption is highly dependent on their post-purchase use. The effect of perceived qualities connected to EV's perceived accidental danger and self-environmental identity was investigated in this study.

DATA ANALYSIS AND HYPOTHESIS

The total sample size is 50, In the questionnaire, 14 questions were asked which are related to dealer's management in the electric cars.

Since the objective is to achieve the 'effectiveness of distribution and good brand image among customers, the below hypothesis developed.

The data is the Likert scale and to achieve a relationship between the factors of the show brand, the correlation is used to validate the hypothesis.

H0: there is no correlation among the factors that influence the perceptions of customers towards dealers of e-vehicle

Ha: there is a correlation among the factors that influence the perceptions of customers towards dealers of e-vehicle

Correlations

		Good value-added service	Communication strategy	Free trials and discount	Competitive pricing
Good value-added service	Pearson Correlation	1	.838**	.772**	.809**
	Sig. (2-tailed)		.000	.000	.000
	N	50	50	50	50

Communication strategy	Pearson Correlation	.838**	1	.796**	.846**
	Sig. (2-tailed)	.000		.000	.000
	N	50	50	50	50
Free trials and discount	Pearson Correlation	.772**	.796**	1	.781**
	Sig. (2-tailed)	.000	.000		.000
	N	50	50	50	50
Competitive pricing	Pearson Correlation	.809**	.846**	.781**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	50	50	50	50

** . Correlation is significant at the 0.01 level (2-tailed).

Phone correspondence, Politeness of staff, Behaviour when you visit the showroom, Query resolve within given timesince the objective is to assess EQ of dealers influencing the customer perception, the following hypothesis developed. The data is rank order hence with one factor Spearman's rho is utilized to test the hypothesis.

$$H_0 : \rho = 0$$

$$H_a : \rho = 0$$

alternatively,

with the above result, rho is greater than 0, hence the H₀ is being rejected thereby accepting H_a, i.e., that there is a correlation among the factors that influence the perceptions of customers towards dealers of e-vehicle.

Findings-

1. From this study we can find out that most (around 55%) of the customers are satisfied with their respective dealer.
2. Around 51% customers visit their dealer for routine maintenance, like oil change, tube, tire rotation.
3. From our study, we came to know that dealer behavior, communication, knowledge about cars, problem solution plays a important role while rating their respective dealer.
4. Indian customer is now slowly started to choose their car as Electric car.
5. Around 30% of people have objection over service quality, efficiency, time consumption, and availability of motor parts.
6. 84% of prospective car owner can choose electric car if they get 2 years of free servicing.
7. 53.2% people are satisfied over the response given by the dealer while complaining.
8. As, in Electric Car industry, there are a smaller number of players in the industry, so people are more aware about the effective difference, so they have preferences while choosing.

9. While choosing the particular Electric Car, 60% people go for brand image, around 40%-45% people depends on preferred car color, brand image, look, and obviously finance.
10. While making the brand image, a big role is there from the dealership end. Good value-added service, effective communication, free trials to feel the car, competitive pricing plays a big role of making big brand image.
11. Electric car needs frequent charging station, so while choosing electric car it plays the most important role.
12. USP plays very important role, as people are always intended to get extra service, special care while buying car.
13. While buying electric car, 55% customers are look for interior, design, innovation, effectiveness of the car.

SUGGESTIONS: -

- The key to developing and identifying the most influential images in brand image research is to enhance them via subsequent business contacts. Customers value a strong brand image because it separates the brand from its competitors. According to the findings, Bengaluru customers have a distinct image of local vehicle brands and are loyal to their country's brands. The most likely explanation for the high level of significant brand image relationship is that Bengaluru consumers are more familiar with and aware of local companies.
- By adding this in-car purchasing brochure they can influence and can increase buying percentage of EV Cars in Bengaluru.
- Consumers are prepared to pay a premium for the added value of environmental responsibility. And if a brand name comes there it will play a vital role to influence the customer in Bengaluru.
- Adding more Charging stations throughout the city will improve the preferable choice of electric cars than the petrol and diesel segments of cars.
- Awareness of uses of EV effect dealership in which government approaches like E-Amrit website will play a vital role in the growth of awareness.

CONCLUSION

India has the world's third-largest road network. In India, road travel appeared to be the favored mode of transportation, with over 60% of the population commuting in personal or shared vehicles. With the depletion of fossil resources and the ongoing rise in fuel prices, India needs to make an energy shift in its automobiles. The government has taken steps to reduce pollution levels by promoting electric vehicles and providing subsidies for their purchase and EV dealers are doing their work beautifully to make the customer understand the need for EVs, and also supporting them whenever needed. Most respondents are happy with their dealer service as well as global climate conditions and are willing to switch from conventional to environmentally-friendly vehicles.

REFERENCES: -

- Tu, J. C., & Yang, C. (2019). Key factors influencing consumers' purchase of electric vehicles. *Sustainability*, 11(14), 3863.

- Karwa, M. K. (2016). Electric Vehicle Dealership Education & Training. *World Electric Vehicle Journal*, 8(4), 974-982.
- Mohammad, A., Zamora, R., & Lie, T. T. (2020). Integration of electric vehicles in the distribution network: A review of PV based electric vehicle modelling. *Energies*, 13(17), 4541.
- Tortato, U., & Marx, R. (2010). Study on the configuration of distribution channels for new automobiles. *Journal of Operations and Supply Chain Management*, 3(1), 67-78.
- Roy, C. (2012). Managing the impact on the electric distribution network of rapid of electric vehicle adoption. *World Electric Vehicle Journal*, 5(3), 748-750.
- Nathan, A., Ahnood, A., Cole, M. T., Lee, S., Suzuki, Y., Hiralal, P., ... & Milne, W. I. (2012). Flexible electronics: the next ubiquitous platform. *Proceedings of the IEEE*, 100(Special Centennial Issue), 1486-1517.
- Krueger, A. O. (1990). Government failures in development. *Journal of Economic perspectives*, 4(3), 9-23.
- Aryan, Y., Yadav, P., & Samadder, S. R. (2019). Life Cycle Assessment of the existing and proposed plastic waste management options in India: A case study. *Journal of Cleaner Production*, 211, 1268-1283.
- Valera, H., & Agarwal, A. K. (2020). Future automotive powertrains for India: methanol versus electric vehicles. In *Alternative fuels and their utilization strategies in internal combustion engines* (pp. 89-123). Springer, Singapore.
- <https://openknowledge.worldbank.org/bitstream/handle/10986/35655/Electric-Mobility-in-India-Accelerating-Implementation.pdf?sequence=1&isAllowed=y>
- <https://beeindia.gov.in/sites/default/files/2019%20-%20EY%20to%20BEE%20-%20Technical%20study%20on%20EVs%20%26%20Charging%20Infrastructure.pdf>
- [EJMCM_Volume%207_Issue%208_Pages%204861-4869](https://www.ejmcm.com/EJMCM_Volume%207_Issue%208_Pages%204861-4869)
- <https://kum.karnataka.gov.in/KUM/PDFS/KEVESPPolicyInsidepagesfinal.pdf>
- <https://indianexpress.com/article/cities/bangalore/bengaluru-city-discom-electric-vehicle-charging-stations-7480762/>
- <https://timesofindia.indiatimes.com/city/bengaluru/despite-growth-of-evs-karnataka-lags-in-subsidising-consumers/articleshow/88232015.cms>
- <https://www.india-briefing.com/news/electric-vehicle-industry-in-india-why-foreign-investors-should-pay-attention-21872.html/>
- <https://kum.karnataka.gov.in/KUM/PDFS/KEVESPPolicyInsidepagesfinal.pdf>
- <https://e-amrit.niti.gov.in/state-level-policies>
- https://e-amrit.niti.gov.in/assets/admin/dist/img/new-fronend-img/report-pdf/Report2-International-Review-on-Integration-of-Electric-Vehicles-charging-infrastructure-with-distribution-grid_GIZ-IITB-compressed.pdf