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Strategic Marketing Frameworks in Electric Car Dealerships: Unlocking the Pathways to Consumer Adoption through Mediation and Moderation Analysis

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Abstract
Electric car dealers are at the forefront of a rapidly evolving automotive industry, where marketing strategies must be adapted to new consumer expectations, technological advancements, and sustainability goals. The study explores the marketing strategies adopted by electric car dealers and its impact on Consumer adoption. Study also investigates the mediation effect of Sales promotion between Brand image of electric car companies and consumer adoption, along with the moderation effect of Dealer's loyalty, Sales person attributes, after sales services on sales promotion and consumer adoption respectively. Data were collected from 200 respondents from 10 electric car showroom in Odisha using simple random sampling method. Partial least square Structural equation modelling (PLS-SEM) was used to analyse the data. The findings exhibit a positive relationship between sales promotion and consumer adoption , brand image and sales promotion, brand image and consumer adoption , likewise there is positive mediation analysis of sales promotion between brand image and consumer adoption , study also found there is positive moderation effect of dealer's loyalty and sales person's attributes on brand image and sales promotion, there is also positive moderation of after sales service between sales promotion and consumer adoption.

Keywords:
Electric car, Electric car dealership, Sales promotion, Marketing strategies, Consumer adoption

1. Introduction
The global shift towards alternative energy resources aims to decrease fossil fuel usage and cut carbon emissions. Internal combustion engine vehicles running on fossil fuels release significant amounts of dust and smoke, driving the need for sustainable alternatives like electric vehicles (EVs). EVs not only reduce oil dependency but also produce zero emissions, making them internationally recognized as an environmental solution (Buekers et al., 2014; ElTayeb et al., 2010; Mukesh & Narwal, 2023a). Powered solely by electricity, EVs rely on rechargeable batteries (Grunditz & Thiringer, 2016; Modern Electric, Hybrid Electric, and Fuel Cell Vehicles, Third Edition, 2018) . In India, out of the 619,037 cars sold this year (Mukesh & Narwal, 2023a) , 9,507 units were electric vehicles, accounting for approximately 2.1% of total sales. In March 2023, Tata Motors sold (Mukesh & Narwal, 2023a) 7,078 electric cars, an increase from 5,318 units in February, with the Tata Tiago

(electric) (Mukesh & Narwal, 2023a)driving this growth.(Mukesh & Narwal, 2023b) Analysts predict that electric car penetration will reach 30% by the end of 2023. A significant issue for consumers is that most Indian car manufacturers do not offer any electric vehicles, with Tata Motors being one of the few providing multiple options (’Mallick & ’Palanisamy, 2023) . In this evolving landscape, electric car dealers face the challenge of not only promoting a relatively new product category but also educating consumers about its benefits and addressing potential concerns. Electric car dealers are embracing innovative marketing strategies to capture the attention of eco-conscious consumers and accelerate market adoption. Sales promotions are pivotal, offering enticing financial incentives and exclusive deals that make EVs more appealing and accessible. At the heart of these strategies is the cultivation of dealer loyalty, fostering strong, lasting relationships that encourage repeat business and build trust. A compelling brand image is essential, as it shapes consumer perceptions and influences purchasing decisions. Equally important are the attributes of sales personnel—knowledgeable, professional, and customer-focused representatives who can effectively communicate the benefits of EV technology and address any concerns. Additionally, exceptional after-sales services, including comprehensive maintenance and support, ensure ongoing customer satisfaction and reinforce the value of electric vehicles. By integrating these elements, dealers not only enhance the appeal of EVs but also pave the way for sustained growth and success in the burgeoning electric car market. As consumers transition from petrol and diesel to electric cars, existing research on traditional dealer strategies becomes outdated. Our study dives into the cutting-edge marketing approaches of today’s electric car dealers.

2. Literature Review

(Kotler & Armstrong, 2010) describe the promotion mix or marketing communication mix as “the unique combination of promotional tools used by a company to effectively convey customer value and strengthen customer relationships.” The five primary promotional tools are advertising, public relations, personal selling, sales promotion, and direct marketing. Electric cars are new and innovative in passenger car market, because of high research and development cost, there is constrain in budgets so sales promotions are simple to implement and often lead to immediate and significant increases in sales (Hanssens et al., 2003). (Langga et al., 2018) sales promotion as activities beyond advertising, personal selling, and publications that encourage consumer purchases, including exhibitions, shows, contests, and demonstrations. Basic sales promotions, like car sales events, are designed to persuade consumers to buy products. Kaur and Saini (2020) investigated how sales promotions influence consumer buying behaviour in the automobile industry. Their research findings indicate that sales promotions can significantly affect consumer purchasing decisions in this sector. Numerous studies have demonstrated that the product category plays a crucial role in consumer decision-making According to (Slegh & Luong, 2014) , consumers develop a stronger psychological attachment to certain products, while their behaviour towards other products is more rational. Products associated with sensory experiences such as pleasure, fun, and enjoyment are termed hedonic products. In contrast, products purchased for their practical uses and essential needs are classified as utilitarian products. (Kempf, 1999) research on product trial promotions explains that hedonic products like passenger cars are more associated with arousal and emotional stimulation, whereas utilitarian products are more closely linked to brand cognition and practical considerations. Brand image represents the perceptions and beliefs that customers hold about a particular product (Lau & Phau, 2007; Rubio et al., 2014). It becomes ingrained in consumers' memories and significantly influences their purchasing behaviour(Fall Diallo et al., 2013).When consumer goes to buy Tata electric

car, they possess and recall the good brand image of Tata cars they heard of and have a positive attitude towards its newly introduced electric cars. Numerous studies have explored the strong connection between brand image and purchasing decisions across various contexts. For instance, (Sasmita & Mohd Suki, 2015) research investigated the strength of this relationship by analysing the buying decisions of 200 respondents in Malaysia who purchased branded goods. Their findings highlighted a positive and significant correlation between brand image and consumers' purchasing choices. In the current market, dealers and manufacturers are increasingly interdependent, with manufacturers relying on dealers for customer interactions and dealers depending on manufacturers for products. While dealers aim to foster repeat purchases over a customer's lifetime, strategies that work for low-cost, low-involvement products may not be effective for high-cost, high-involvement purchases like automobiles (Suh & Yi, 2006). Simple behaviour modification techniques, such as loyalty cards, may encourage repeat service visits but are insufficient for big-ticket items (Barat et al., 2013) . Since customers often have long intervals between car purchases and minimal non-advertising interactions with the brand (Dawes et al., 2015) , dealerships can benefit from maintaining frequent, low-involvement contact to stay top-of-mind. This familiarity may help foster a positive attitude and, when combined with existing relationships, strengthen dealership loyalty, reducing the likelihood of customers switching brands when purchasing a new car (Raimondo et al., 2008) . Customer satisfaction hinges on how closely the salesperson's interaction aligns with customer expectations. However, as today's consumers are more informed and knowledgeable than in the past, their expectations and demands during sales interactions have risen (Habel et al., 2020; Rippé et al., 2016) . Salesperson attributes, including assistance, approachability, attentiveness, proficiency, familiarity with the products, and capability to respond to inquiries, play a crucial role in shaping customer satisfaction and driving positive word-of-mouth. because as electric cars are new in market, a better proficiency of sales person would convey buyers to purchase the product. After-sales services stand out as a key determinant of customer satisfaction and retention (Kurata & Nam, 2010). For durable products, offering after-sales services is not just legally required but also presents an opportunity for firms to enhance their competitive edge (Li et al., 2014) . Automobile companies typically outsource after-sales services to retailers (Davies, 2004) . For instance, manufacturers like Toyota, Volkswagen, and BMW rely on their retailers to handle services such as routine maintenance and repairs. As the primary point of contact with consumers, vendors play a crucial role in maintaining customer satisfaction and serve as a key feedback channel between businesses and consumers (Ali & Dubey, 2014). Since electric vehicles (EVs) do not require regular oil changes and the maintenance associated with internal combustion engines, this factor can significantly influence dealerships to promote specific vehicles to potential buyers(Tromaras et al., 2017). However, Cahill et al. (2015) present conflicting data, indicating that gross profits for plug-in electric vehicles (PEVs) vary greatly by make and model, with the average profit for PEVs being higher than that for comparable conventional vehicles. Although the data reflect average gross profits, this doesn't imply that dealerships are immune to potential losses on individual PEV sales. Instead, it suggests that, on average, dealerships tend to see better profits with PEVs compared to traditional vehicles. Additionally, dealerships may earn modest profits by selling supplementary items like charging equipment or products like tinted windows, which are marketed as range extenders by enhancing cabin climate control (Cahill et al., n.d.) . It's also noted that EV buyers often purchase them as secondary vehicles, leading to fewer trade-ins of conventional cars, which, as previously mentioned, are a major profit source for dealerships (Cahill et al., n.d.).In some instances, car dealerships may approach EV sales with a traditional mindset suited to conventional vehicles.

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Dealers might focus on aspects such as the sale price, limited range, and inadequate infrastructure, leading them to recommend internal combustion vehicles instead. This approach suggests that EVs may not always be marketed effectively based on their actual benefits. Additionally, the time required to sell an EV can influence dealership promotion. As noted by a Nissan business development manager cited by Richtel (2015) (Tromaras et al., 2017), selling a Nissan Leaf takes significantly longer than selling two conventional vehicles. This results in salespeople working harder for a relatively small bonus, which may not adequately reward their effort. (Cahill et al., n.d.) also highlight that dealers report much longer transaction times for PEVs, from customer arrival to vehicle delivery. To explore the marketing strategies of electric car dealership of all the attributes discussed, our research formulates the following research questions:

1. What is the effect of sales promotion of Electric car dealers on Consumer adoption?
2. What is the effect of Brand image of Electric car on the sales promotion?
3. What is the effect of Brand image on Consumer adoption of Electric car?
4. Does there any mediation effect of sales promotion between Brand image and Consumer adoption?
5. Does the Dealer's loyalty moderate the relation between Brand image and Sales promotion?
6. Does the after sales services of dealer have a moderating effect on sales promotion and consumer adoption?
7. Do the sales person's attributes moderate the relation between brand image and sales promotion?

3. Objectives of the study

- To Study the impact of sales promotion of Electric car dealers on Consumer adoption
- To Study the impact of Brand image of Electric car on the sales promotion
- To Study the impact of Brand image on Consumer adoption of Electric car
- To investigate the mediation effect of sales promotion between Brand image and Consumer adoption
- To investigate the moderation effect of Dealer's loyalty between Brand image and Sales promotion
- To investigate the moderation effect of after sales services of dealer between sales promotion and consumer adoption
- To investigate the moderation effect of sales person's attributes between brand image and sales promotion

4. Research framework and Research Hypothesis

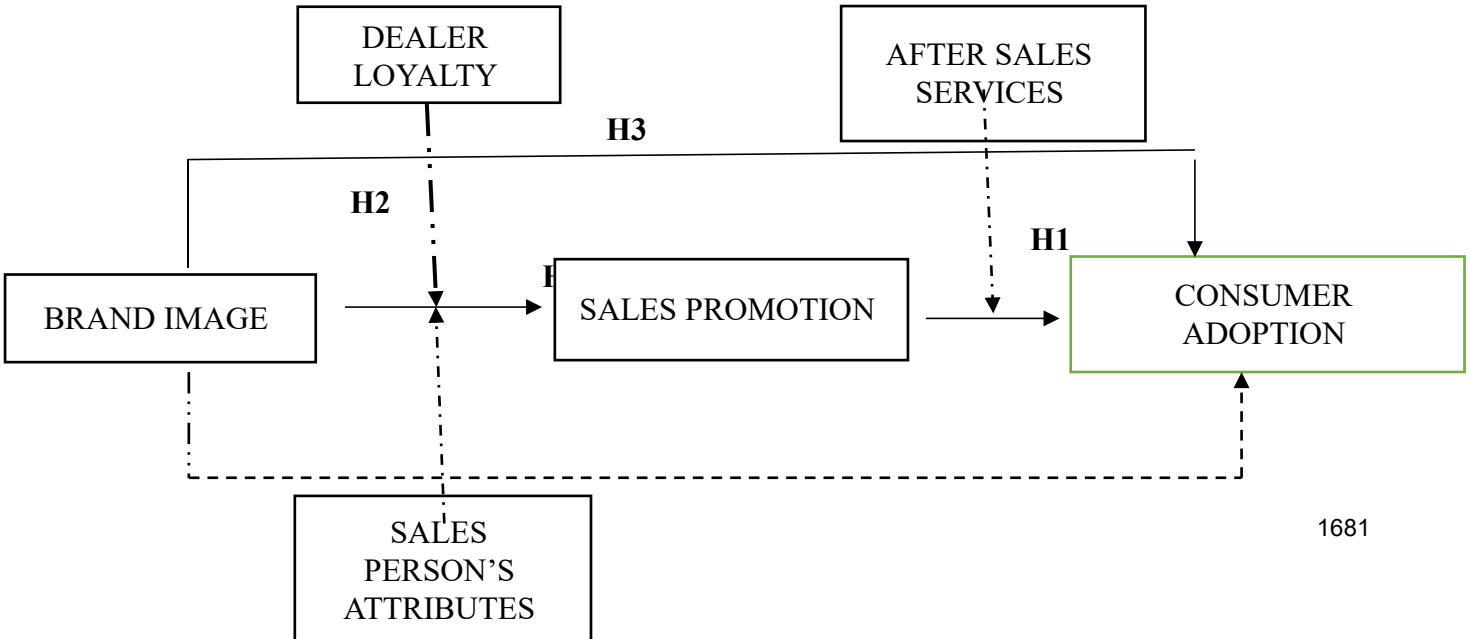

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Figure 1: Research Framework

Research Hypothesis

H1: Sales promotion of Electric car dealers has a significant positive effect on Consumer adoption
H2: Brand image has a significant positive effect on sales promotion of electric car dealer
H3: Brand image has a significant positive effect on Consumer adoption of electric car
H4: Brand image has a significant positive mediation effect between sales promotion of electric car dealer and Consumer adoption

H5: Dealer's loyalty has a positive moderation effect on brand image and sales promotion
H6: After sales services has a positive moderation effect on sales promotion and consumer adoption
H7: Sales person's attributes have a positive moderation effect on brand image and sales promotion

3. Research methodology

3.1 Research design and Sampling Procedure

This study employed empirical analysis to critically evaluate the marketing strategies adopted by electric car dealers, for this a cross-sectional survey design method is adopted by the researcher**.** The study is conducted in the State of Odisha, India within the time frame of July 2024-August 2024. The electric car dealers in Odisha are selected on the basis of random sampling method and a total of 70 electric car dealers in which 10 car dealers each from of TATA Motors, Morris Garage, Mahindra, Toyota, Maruti Suzuki, Hyundai, Honda, Mercedes-benz, Audi, kia motors. The questionnaire is distributed to the Customers visiting the showroom, a total of 250 questionnaire are distributed, after the data cleaning process and omitting invalid responses .200 responses are turned to be valid and used in the analysis

3.2 Measurement

The Questionnaire is divided into two parts: First part describes about the demographic characteristics of the respondents and the second part consists of seven constructs in which 35 items are structured in the questionnaire defining each independent and dependant variables. The items are to be measured using the five-point Likert scale and are coded as 5 for "strongly agree" and 1 for strongly disagree"

3.3 Data analysis

This study leveraged Partial Least Squares Structural Equation Modelling (PLS-SEM) to enhance the rigor and replicability of its findings. PLS-SEM, a widely adopted statistical technique, has proven valuable across diverse academic disciplines, including operations and international management (Peng & Lai, 2012; Richter et al., 2016), strategic management and marketing (Hair et al., 2012), tourism (do-Valle & Assaker, 2016), family business (Sarstedt et al., 2014), organizational and group research (Sosik et al., 2009), and accounting (Lee et al., 2011). This research used Smart PLS 3 software to analyse the data. First, it checked the

reliability and validity of the measurement model using composite reliability, average variance extracted, heterotrait-monotrait ratio, and Cronbach's alpha. Second, it analysed the theoretical model by examining correlations and discriminant validity. Third, it tested for common method bias using variance inflation factor, F2, coefficient of determination, predictive relevance, and standardized root mean square residual. Finally, structural equation modelling was conducted to evaluate the proposed hypotheses.

4. Results

4.1 Demographic Characteristics of the Respondents

Table 1 describes about the respondents age, gender, occupation, monthly income, previous internal combustion engine car ownership, knowledge about electric cars. As mentioned in table, most of the respondents are males i.e., 60% while females are 40% in total. The age group of 28-40 are maximum consisting of 40% of the overall respondents, coming to occupation the share of Salaried personnel is maximum ie., 56%, the participants have previous ownership of traditional petrol or diesel cars (ICE) are higher in number i.e., 55%, most of the respondents having the knowledge of electric car before purchasing the car i.e 62%.

Table 1

Variable	Category	Frequency	Percentage
Gender	Male	120	60
	Female	80	40
Age	18-27	50	20
	28-37	110	40
	38-50	20	20
	51-60	20	20
Occupation	Salaried Personnel	112	56
	Businessman	88	44
Monthly income	Rs 50,000- 1,00,000	120	60
	Rs.1,00,001-1,50,000	50	25
	Above 1,50,000	30	15
Previous ownership of internal combustion engine car	No car	88	44
	One car	112	56
Knowledge and awareness about Electric car	Yes	124	62
	No	76	38

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4.2 Measurement Model

Cronbach's alpha (α): The reliability of scale is measured by the adoption of Cronbach's alpha (α). The scale of measurement tends to be valid as Cronbach alpha's values for Dealer's loyalty (DL) was 0.902, similarly for Brand image (BI) it was 0.932, Sales promotion (SP) was 0.915, Sales person's attributes was 0.886 and after sales service (AS) was 0.888, Consumer adoption (CA) was 0.923 as mentioned in Table 2. The Cronbach's alpha values for the scales ranged from 0.7 to 0.9, which is considered acceptable according to (Perry Hinton et al.,2004)

Convergent Validity (Average Variance extracted): (Fornell & Larcker, 1981) suggested a convergent validity threshold of at least 0.50. Average variance extracted (AVE) for our study ranged from 0.712 to 0.856 as shown in Table 2.

Composite Reliability (CR): Previous research by and (Hair et al., 2011) indicated that acceptable values for Composite Reliability (CR) or internal consistency reliability should be 0.7 or higher (Khan et al., 2017) . In the current study, CR values were observed to range between 0.930 and 0.980 (see Table 2).

Discriminant validity: The Fornell-Larcker criterion matrix presented in Table 3 demonstrates that discriminant validity has been achieved. This is confirmed by the fact that no value within a column or row is greater than the corresponding diagonal value, as suggested by (Byrne, 2013) . Additionally, the findings reveal a positive and significant relationship between SP and CA (0.725), DL and CA (0.765), and AS and CA (0.732).

Table 2

Constructs	Item Coding	Composite Reliability	Cronbach's alpha (α)	Average variance extracted (AVE)	Factor loadings	Weights
Sales Promotion(SP)	SP 1				0888	0.234
	SP 2	0.930	0.915	0.762	0.878	0.256
	SP 3				0.897	0.287
	SP 4				0.902	0.302
	SP 5				0.912	0.314
Dealer's Loyalty (DL)	DL 1				0.897	0.312
	DL 2	0.895	0.876	0.789	0.876	0.293
	DL 3				0.908	0.345
	DL 4				0.802	0.234
	DL 5				0.876	0.246
Brand image (BI)	BI 1				0.802	0.278
	BI 2	0.852	0.834	0.687	0.834	0.267
	BI 3				0.903	0.284

	BI 4				0.884	0.304
Salesperson attributes(SA)	SA 1				0.877	0.286
	SA 2	0.924	0.902	0.797	0.892	0.332
	SA 3				0.835	0.253
	SA4				0.808	0.279
After-sales service (AS)	AS 1				0.893	0.345
	AS 2	0.956	0.932	0.772	0.867	0.289
	AS 3				0.821	0.234
	AS 4				0.814	0.266
Consumer adoption (CA)	CA 1				0.909	0.356
	CA 2	0.902	0.892	0.702	0.894	0.234
	CA 3				0.856	0.246

Table 3: Fornell -Larcker Criterion Matrix

Latent constructs	SP	DL	BI	SA	AS	CA
SP	**0.872**					
DL	0.703	**0.888**				
BI	0.714	0.786	**0.828**			
SA	0.634	0.705	0.805	**0.892**		
AS	0.626	0.812	0.723	0.712	**0.878**	
CA	0.725	0.765	0.732	0.604	0.756	**0.837**

Bold values in diagonal represents the square root of average variance extracted, while the off-diagonals values represent the correlation.

4.3 Assessment of structural model

Standardized Root Mean Square Residual (SRMR) values were utilized to assess the model's fitness. Following the guidelines provided by(Henseler et al., 2016), the SRMR should be less than 0.08. Additionally, based on recent findings by (Cho et al., 2020), an SRMR value below 0.08 is recommended for sample sizes exceeding 100. This research demonstrates a satisfactory model fit, as indicated by an SRMR value of 0.062. additionally, based on the determination coefficient R^2, the structural model accounted for 58% of the variance in Consumer adoption of electric cars, explained by sales promotion of dealers and brand image of electric company. It also explained 64.6% of the variance in sales promotion, driven brand image of the electric car. According to (Chin, 1998), acceptable R^2 values should be greater than 0.1 or zero. Moreover, the Q^2 value must also be greater than zero to be considered significant. As we mentioned in Table 4 that both the ^{R2} and Q^2 are greater than 0.1 value so that the model's predictive significance was achieved, as suggested by(Falk & Miller, 1992). Additionally, (Cohen, 2013) classifies f^2 or effect size as small (0.02), medium (0.15), and Significant (0.35), with values below 0.02 indicating no effect. The results demonstrate a

significant effect with an f^2 value of 0.38 (Table 4).

Table 4

Constructs	SRMR	Variance inflation factor (VIF)	R^2	Adjusted R^2	Q^2	f^2
CA	0.062	1.345	0.580	0.580	0.542	0.38
SP		1.432	0.645	0.646	0.502	

4.4 Multicollinearity

The study conducted a Variance Inflation Factor (VIF) test to assess the presence of multicollinearity in the data. According to(Aiken et al., 1991), VIF values should be less than 10. As shown in Table 4, all VIF values are below 10, indicating that multicollinearity was not a concern.

4.5 Structural equation modelling

The PLS-SEM analysis revealed several significant relationships. First, SP exhibited a direct, positive, and significant influence on CA (H1), with a β of 0.314, t-value of 13.056, and a p-value of = less than 0.05 (Table 5). Similarly, BI had a direct, positive, and significant effect on SP (H2), indicated by a β of 0.416, t-value of 20.098, and a p-value = < 0.05. Additionally, BI was found to have a positive and significant direct impact on CA (H2), with a β of 0.243, t-value of 10.124, (Table 5). The analysis further showed that SP played a positive and significant mediating role in the relationship between BI and CA (H4), with a β of 0.189, t-value of 11.048, and a p-value = <0.05.(Table 5) Moreover, the moderation effect of Dealer's loyalty between the Brand image and Sales promotion was both positive and significant (H5), with a β of 0.177, t-value of 8.056, and a p-value = < 0.05. This interaction diagram elaborated in Figure 3, shows that high impact of Dealer's loyalty enhances the relationship between Brand image of the respective car company with its sales promotion. Similarly, the moderating effect of after-sales service of the electric car between Sales promotion and Consumer adoption(H6) was positive and significant with β of 0.162, t value of 7.236 and p value =less than 0.5. In figure 4 it is explained through interaction diagram that if after sales services are good then it will increase the consumer adoption predicted by sales promotion of the dealer. Likewise, there is also positive and moderating effect of sales attributes of sales person between the brand image and sales promotion with a beta of 0.154, t value of 6.453, p value = < 0.05 (H7). The interaction diagrams defined in Figure 5 explain a good sales person sales attributes have a positive moderation to increase the sales promotion predicted by brand image.

4.6 Summary of Hypothesis

Table 5

Effects	Relationship	Beta	Mean	STDEV	t value	Results
Direct						
H1	SP→ CA	0.314	0.312	0.027	13.056	Supported
H2	BI→ SP	0.416	0.413	0.036	20.098	Supported
H3	BI→ CA	0.243	0.244	0.022	10.124	Supported
Indirect						
H4	BI → SP	0.189	0.188	0.015	11.048	Supported

	CA					
H5	BI SP →*DL	0.177	0.178	0.013	8.056	Supported
H6	SP CA →*AS	0.162	0.163	0.014	7.236	Supported
H7	BI SP →*SA	0.154	0.155	0.012	6.753	Supported

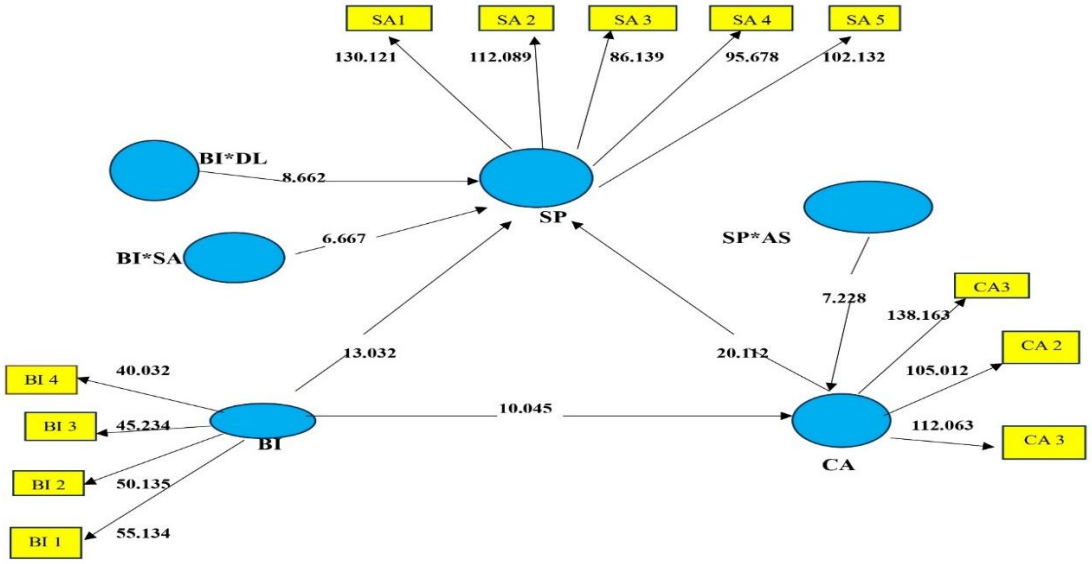

Figure 2: **PLS-SEM Model**

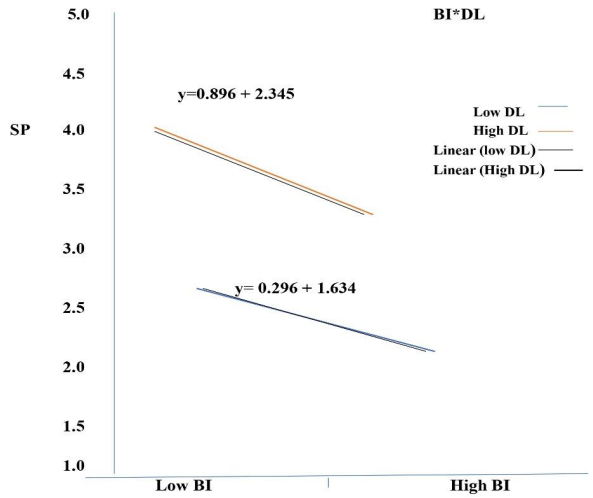

Figure 3: Interaction diagram of DL between BI and SP

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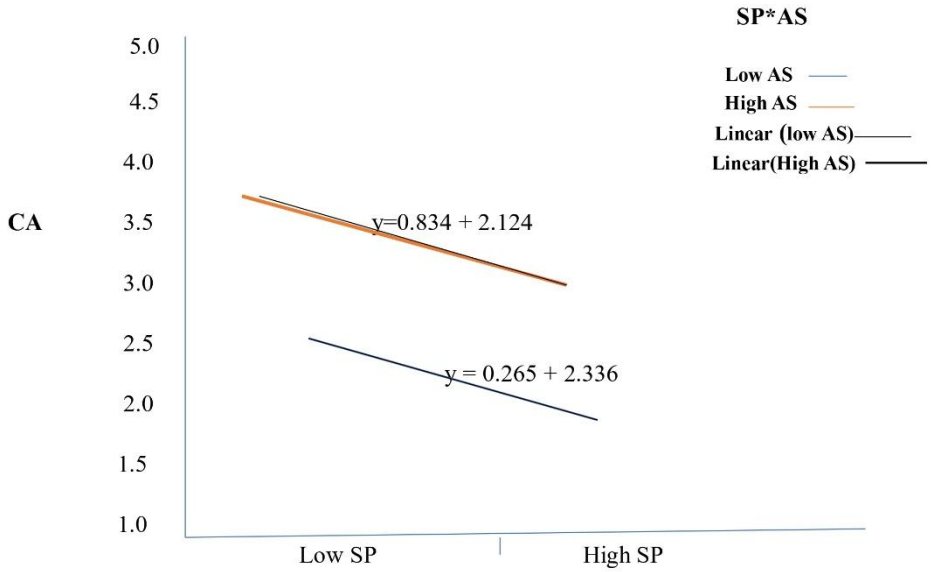

Figure 4: Interaction diagram between SP and CA

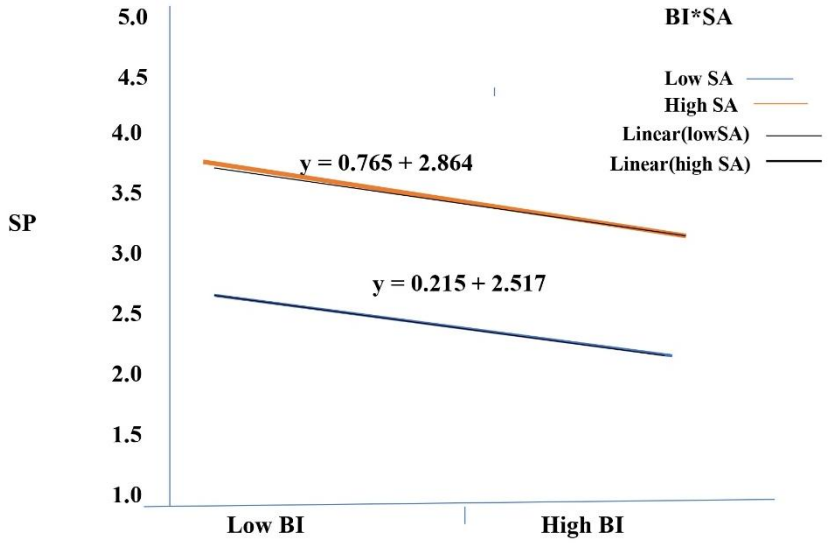

Figure 5: Interaction diagram of SA between BI and SP

6. Discussion and Implications

The findings highlight that pivotal role of sales promotions, brand image, and consumer adoption in the electric car market. Sales promotion plays a critical role in enhancing consumer adoption of electric vehicles, acting as a bridge between consumer interest and commitment. The findings highlight that effective sales promotions directly influence consumer behaviour, making them a key driver in the adoption process. For electric car dealers, leveraging targeted promotions not only boosts immediate sales but also fosters long-term customer relationships by addressing initial hesitations and incentivizing trial and purchase. Furthermore, the relationship between brand image and sales promotion underscores the importance of aligning promotional strategies with brand values. A strong brand image amplifies the effectiveness of sales promotions, making them more appealing and credible to potential buyers. This synergy is crucial for dealers aiming to establish trust

and build a loyal customer base in a competitive market. The study also reveals the importance of human factors, such as salesperson attributes and dealer loyalty, in enhancing the impact of sales promotions. Knowledgeable and personable sales staff can significantly boost the effectiveness of promotions, while loyal dealers ensure consistent and sustained efforts in reaching consumers. Additionally, the positive effect of after-sales services on the relationship between sales promotion and consumer adoption emphasizes the need for comprehensive support, ensuring that promotional success translates into long-term customer satisfaction**.**

Theoretical and Managerial implications

The study contributes to the understanding of how sales promotions, brand image, and moderating factors influence consumer adoption in the electric vehicle market. It underscores the importance of integrating direct and indirect effects, providing a comprehensive framework for understanding adoption behaviour for managers, these findings offer clear strategies: align promotional activities with brand image, invest in salesperson training, foster dealer loyalty, and enhance after-sales services. By doing so, electric car dealers can drive higher adoption rates and strengthens their market position, leveraging the combined effects of these factors to support sustainable growth in the electric car sector

7. Conclusion and Future Scope

The study underscores the pivotal role of strategic marketing in the electric car (EV) industry. Our findings reveal that sales promotions significantly enhance consumer adoption, while the brand image of electric car companies acts as a catalyst for both improved sales promotions and heightened consumer adoption. Additionally, the positive mediation effect of sales promotions on the relationship between brand image and consumer adoption highlights the importance of promotional strategies in reinforcing brand perceptions and driving purchase decisions. Salesperson attributes and dealer loyalty emerge as crucial factors, moderating the effectiveness of brand image and sales promotions. The impact of salesperson attributes on brand image and sales promotions suggests that well-trained and knowledgeable sales staff can amplify promotional efforts and positively influence brand perception. Similarly, dealer loyalty plays a significant role in sustaining effective brand image and promotional strategies. Furthermore, after-sales service proves to be a vital moderating factor, bridging the gap between sales promotions and consumer adoption, thereby emphasizing the importance of continuous customer support in maintaining consumer interest and satisfaction. Future research could delve deeper into the interplay between different marketing strategies and their long-term effects on brand loyalty and consumer behaviour. Exploring how emerging technologies, such as AI and data analytics, can further optimize sales promotions and after-sales services could offer valuable insights. Additionally, examining the role of environmental sustainability in shaping brand image and consumer adoption may reveal new dimensions in the evolving landscape of electric vehicle marketing.

References

1. Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple Regression: Testing and Interpreting Interactions*. SAGE Publications. https://books.google.co.in/books?id=LcWLUyXcmnkC
2. Ali, S. S., & Dubey, R. (2014). Redefining Retailer's Satisfaction Index: A Case of FMCG Market in India. *Procedia - Social and Behavioral Sciences*, *133*, 279–290. https://doi.org/10.1016/j.sbspro.2014.04.194

3. Barat, S., Amos, C., Paswan, A., & Holmes, G. (2013). An exploratory investigation into how socioeconomic attributes influence coupons redeeming intentions. *Journal of Retailing and Consumer Services*, *20*(2), 240–247. https://doi.org/10.1016/j.jretconser.2013.01.004
4. Buekers, J., Van Holderbeke, M., Bierkens, J., & Int Panis, L. (2014). Health and environmental benefits related to electric vehicle introduction in EU countries. *Transportation Research Part D: Transport and Environment*, *33*, 26–38. https://doi.org/10.1016/j.trd.2014.09.002
5. Byrne, B. M. (2013). *Structural equation modeling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications, and programming*. psychology press.
6. Cahill, E. C., Davies, J., Turrentine, T., Cahill, E. C., Davies, J., & Turrentine, T. (n.d.). *Working Paper New Car Dealers and Retail Innovation in California's Plug-in Electric Vehicle Market*.
7. Chin, W. W. (1998). The partial least squares approach for structural equation modeling. In *Modern methods for business research.* (pp. 295–336). Lawrence Erlbaum Associates Publishers.
8. Cho, G., Hwang, H., Sarstedt, M., & Ringle, C. M. (2020). Cutoff criteria for overall model fit indexes in generalized structured component analysis. *Journal of Marketing Analytics*, *8*(4), 189–202. https://doi.org/10.1057/s41270-020-00089-1
9. Cohen, J. (2013). *Statistical Power Analysis for the Behavioral Sciences*. Taylor & Francis. https://books.google.co.in/books?id=cIJH0lR33bgC
10. Davies, A. (2004). Moving base into high-value integrated solutions: A value stream approach. *Industrial and Corporate Change*, *13*(5), 727–756. https://doi.org/10.1093/icc/dth029
11. Dawes, J., Meyer-Waarden, L., & Driesener, C. (2015). Has brand loyalty declined? A longitudinal analysis of repeat purchase behavior in the UK and the USA. *Journal of Business Research*, *68*(2), 425–432. https://doi.org/10.1016/j.jbusres.2014.06.006
12. ElTayeb, T. K., Zailani, S., & Jayaraman, K. (2010). The examination on the drivers for green purchasing adoption among EMS 14001 certified companies in Malaysia. *Journal of Manufacturing Technology Management*, *21*(2), 206–225. https://doi.org/10.1108/17410381011014378
13. Falk, R. F., & Miller, N. B. (1992). A primer for soft modeling. In *A primer for soft modeling.* University of Akron Press.
14. Fall Diallo, M., Chandon, J. L., Cliquet, G., & Philippe, J. (2013). Factors influencing consumer behaviour towards store brands: Evidence from the French market. *International Journal of Retail & Distribution Management*, *41*(6), 422–441. https://doi.org/10.1108/09590551311330816
15. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.2307/3151312
16. Grunditz, E. A., & Thiringer, T. (2016). Performance Analysis of Current BEVs Based on a Comprehensive Review of Specifications. *IEEE Transactions on Transportation Electrification*, *2*(3), 270–289. https://doi.org/10.1109/TTE.2016.2571783
17. Habel, J., Kassemeier, R., Alavi, S., Haaf, P., Schmitz, C., & Wieseke, J. (2020). When do customers perceive customer centricity? The role of a firm's and salespeople's customer orientation. *Journal of Personal Selling and Sales Management*, *40*(1), 25–42. https://doi.org/10.1080/08853134.2019.1631174

18. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139–152. https://doi.org/10.2753/MTP1069-6679190202
19. Hanssens, D. M., Parsons, L. J., & Schultz, R. L. (2003). *Market Response Models: Econometric and Time Series Analysis* (Issue v. 2). Springer US. https://books.google.co.in/books?id=xZyJamKdpIsC
20. Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management and Data Systems*, *116*(1), 2–20. https://doi.org/10.1108/IMDS-09-2015-0382
21. Kempf, D. A. S. (1999). Attitude formation from product trial: Distinct roles of cognition and affect for hedonic and functional products. *Psychology and Marketing*, *16*(1), 35–50. https://doi.org/10.1002/(SICI)1520-6793(199901)16:1<35::AID-MAR3>3.0.CO;2-U
22. Khan, M. A. S., Jianguo, D., Usman, M., & Ahmad, M. I. (2017). Moderated mediation model of interrelations between workplace romance, wellbeing, and employee performance. *Frontiers in Psychology*, *8*(DEC). https://doi.org/10.3389/fpsyg.2017.02158
23. Kotler, P., & Armstrong, G. (2010). *Principles of Marketing*. Pearson. https://books.google.co.in/books?id=ZW2u5LOmbs4C
24. Kurata, H., & Nam, S. H. (2010). After-sales service competition in a supply chain: Optimization of customer satisfaction level or profit or both? *International Journal of Production Economics*, *127*(1), 136–146. https://doi.org/10.1016/j.ijpe.2010.05.005
25. Langga, A. S. W., Alhabsji, T., Notosubroto, S., & Kusumawati, A. (2018). EFFECTS OF INTENSIVE DISTRIBUTION AND SALES PROMOTION ON CORPORATE IMAGE AND CONSUMER-BASED BRAND EQUITY: A STUDY ON SUZUKI CAR CONSUMERS OF PT. SURYA BATARA MAHKOTA, EAST NUSA TENGGARA, INDONESIA. *Russian Journal of Agricultural and Socio-Economic Sciences*, *81*(9), 172–184. https://doi.org/10.18551/rjoas.2018-09.20
26. Lau, K. C., & Phau, I. (2007). Extending symbolic brands using their personality: Examining antecedents and implications towards brand image fit and brand dilution. *Psychology and Marketing*, *24*(5), 421–444. https://doi.org/10.1002/mar.20167
27. Li, G., Huang, F. F., Cheng, T. C. E., Zheng, Q., & Ji, P. (2014). Make-or-buy service capacity decision in a supply chain providing after-sales service. *European Journal of Operational Research*, *239*(2), 377–388. https://doi.org/10.1016/j.ejor.2014.05.035
28. ’Mallick, K., & ’Palanisamy, K. (2023). *India: Sales of Electric Cars - March 2023*. https://www.pluginindia.com/blogs/india-sales-of-electric-cars-march-2023
29. *Modern Electric, Hybrid Electric, and Fuel Cell Vehicles, Third Edition*. (2018). CRC Press. https://doi.org/10.1201/9780429504884
30. Mukesh, & Narwal, M. (2023a). Predicting consumer purchase intention on electric cars in India: Mediating role of attitude. *Business Strategy & Development*, *6*(4), 942–956. https://doi.org/10.1002/bsd2.289
31. Mukesh, & Narwal, M. (2023b). Predicting consumer purchase intention on electric cars in India: Mediating role of attitude. *Business Strategy and Development*, *6*(4), 942–956. https://doi.org/10.1002/bsd2.289
32. Perry Hinton, D., Hinton, P. R., McMurray, I., & Brownlow, C. (2004). *SPSS Explained*. Taylor & Francis. https://books.google.co.in/books?id=5iyDAgAAQBAJ
33. Raimondo, M. A., Miceli, G., & Costabile, M. (2008). How relationship age moderates loyalty formation: The increasing effect of relational equity on customer loyalty. In

Journal of Service Research (Vol. 11, Issue 2, pp. 142–160). https://doi.org/10.1177/1094670508324678

34. Rippé, C. B., Weisfeld-Spolter, S., Dubinsky, A. J., Arndt, A. D., & Thakkar, M. (2016). Selling in an asymmetric retail world: perspectives from India, Russia, and the US on buyer–seller information differential, perceived adaptive selling, and purchase intention. *Journal of Personal Selling and Sales Management*, *36*(4), 344–362. https://doi.org/10.1080/08853134.2016.1215923
35. Rubio, N., Oubiña, J., & Villaseñor, N. (2014). Brand awareness-Brand quality inference and consumer's risk perception in store brands of food products. *Food Quality and Preference*, *32*(PC), 289–298. https://doi.org/10.1016/j.foodqual.2013.09.006
36. Sasmita, J., & Mohd Suki, N. (2015). Young consumers' insights on brand equity: Effects of brand association, brand loyalty, brand awareness, and brand image. *International Journal of Retail and Distribution Management*, *43*(3), 276–292. https://doi.org/10.1108/IJRDM-02-2014-0024
37. Slegh, D., & Luong, A. (2014). Hedonic product discounts: When is the price right? *Nankai Business Review International*, *5*(4), 356–364. https://doi.org/10.1108/NBRI-03-2014-0018
38. Suh, J. C., & Yi, Y. (2006). When brand attitudes affect the customer satisfaction-loyalty relation: The moderating role of product involvement. *Journal of Consumer Psychology*, *16*(2), 145–155. https://doi.org/10.1207/s15327663jcp1602_5
39. Tromaras, A., Aggelakakis, A., & Margaritis, D. (2017). Car dealerships and their role in electric vehicles' market penetration-A Greek market case study. *Transportation Research Procedia*, *24*, 259–266. https://doi.org/10.1016/j.trpro.2017.05.116
40. Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple Regression: Testing and Interpreting Interactions*. SAGE Publications. https://books.google.co.in/books?id=LcWLUyXcmnkC
41. Ali, S. S., & Dubey, R. (2014). Redefining Retailer's Satisfaction Index: A Case of FMCG Market in India. *Procedia - Social and Behavioral Sciences*, *133*, 279–290. https://doi.org/10.1016/j.sbspro.2014.04.194
42. Barat, S., Amos, C., Paswan, A., & Holmes, G. (2013). An exploratory investigation into how socioeconomic attributes influence coupons redeeming intentions. *Journal of Retailing and Consumer Services*, *20*(2), 240–247. https://doi.org/10.1016/j.jretconser.2013.01.004
43. Buekers, J., Van Holderbeke, M., Bierkens, J., & Int Panis, L. (2014). Health and environmental benefits related to electric vehicle introduction in EU countries. *Transportation Research Part D: Transport and Environment*, *33*, 26–38. https://doi.org/10.1016/j.trd.2014.09.002
44. Byrne, B. M. (2013). *Structural equation modeling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications, and programming*. psychology press.
45. Cahill, E. C., Davies, J., Turrentine, T., Cahill, E. C., Davies, J., & Turrentine, T. (n.d.). *Working Paper New Car Dealers and Retail Innovation in California's Plug-in Electric Vehicle Market*.
46. Chin, W. W. (1998). The partial least squares approach for structural equation modeling. In *Modern methods for business research.* (pp. 295–336). Lawrence Erlbaum Associates Publishers.
47. Cho, G., Hwang, H., Sarstedt, M., & Ringle, C. M. (2020). Cutoff criteria for overall model fit indexes in generalized structured component analysis. *Journal of Marketing Analytics*, *8*(4), 189–202. https://doi.org/10.1057/s41270-020-00089-1

48. Cohen, J. (2013). *Statistical Power Analysis for the Behavioral Sciences*. Taylor & Francis. https://books.google.co.in/books?id=cIJH0lR33bgC
49. Davies, A. (2004). Moving base into high-value integrated solutions: A value stream approach. *Industrial and Corporate Change*, *13*(5), 727–756. https://doi.org/10.1093/icc/dth029
50. Dawes, J., Meyer-Waarden, L., & Driesener, C. (2015). Has brand loyalty declined? A longitudinal analysis of repeat purchase behavior in the UK and the USA. *Journal of Business Research*, *68*(2), 425–432. https://doi.org/10.1016/j.jbusres.2014.06.006
51. ElTayeb, T. K., Zailani, S., & Jayaraman, K. (2010). The examination on the drivers for green purchasing adoption among EMS 14001 certified companies in Malaysia. *Journal of Manufacturing Technology Management*, *21*(2), 206–225. https://doi.org/10.1108/17410381011014378
52. Falk, R. F., & Miller, N. B. (1992). A primer for soft modeling. In *A primer for soft modeling.* University of Akron Press.
53. Fall Diallo, M., Chandon, J. L., Cliquet, G., & Philippe, J. (2013). Factors influencing consumer behaviour towards store brands: Evidence from the French market. *International Journal of Retail & Distribution Management*, *41*(6), 422–441. https://doi.org/10.1108/09590551311330816
54. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.2307/3151312
55. Grunditz, E. A., & Thiringer, T. (2016). Performance Analysis of Current BEVs Based on a Comprehensive Review of Specifications. *IEEE Transactions on Transportation Electrification*, *2*(3), 270–289. https://doi.org/10.1109/TTE.2016.2571783
56. Habel, J., Kassemeier, R., Alavi, S., Haaf, P., Schmitz, C., & Wieseke, J. (2020). When do customers perceive customer centricity? The role of a firm's and salespeople's customer orientation. *Journal of Personal Selling and Sales Management*, *40*(1), 25–42. https://doi.org/10.1080/08853134.2019.1631174
57. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139–152. https://doi.org/10.2753/MTP1069-6679190202
58. Hanssens, D. M., Parsons, L. J., & Schultz, R. L. (2003). *Market Response Models: Econometric and Time Series Analysis* (Issue v. 2). Springer US. https://books.google.co.in/books?id=xZyJamKdpIsC
59. Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management and Data Systems*, *116*(1), 2–20. https://doi.org/10.1108/IMDS-09-2015-0382
60. Kempf, D. A. S. (1999). Attitude formation from product trial: Distinct roles of cognition and affect for hedonic and functional products. *Psychology and Marketing*, *16*(1), 35–50. https://doi.org/10.1002/(SICI)1520-6793(199901)16:1<35::AID-MAR3>3.0.CO;2-U
61. Khan, M. A. S., Jianguo, D., Usman, M., & Ahmad, M. I. (2017). Moderated mediation model of interrelations between workplace romance, wellbeing, and employee performance. *Frontiers in Psychology*, *8*(DEC). https://doi.org/10.3389/fpsyg.2017.02158
62. Kotler, P., & Armstrong, G. (2010). *Principles of Marketing*. Pearson. https://books.google.co.in/books?id=ZW2u5LOmbs4C

63. Kurata, H., & Nam, S. H. (2010). After-sales service competition in a supply chain: Optimization of customer satisfaction level or profit or both? *International Journal of Production Economics*, *127*(1), 136–146. https://doi.org/10.1016/j.ijpe.2010.05.005
64. Langga, A. S. W., Alhabsji, T., Notosubroto, S., & Kusumawati, A. (2018). EFFECTS OF INTENSIVE DISTRIBUTION AND SALES PROMOTION ON CORPORATE IMAGE AND CONSUMER-BASED BRAND EQUITY: A STUDY ON SUZUKI CAR CONSUMERS OF PT. SURYA BATARA MAHKOTA, EAST NUSA TENGGARA, INDONESIA. *Russian Journal of Agricultural and Socio-Economic Sciences*, *81*(9), 172–184. https://doi.org/10.18551/rjoas.2018-09.20
65. Lau, K. C., & Phau, I. (2007). Extending symbolic brands using their personality: Examining antecedents and implications towards brand image fit and brand dilution. *Psychology and Marketing*, *24*(5), 421–444. https://doi.org/10.1002/mar.20167
66. Li, G., Huang, F. F., Cheng, T. C. E., Zheng, Q., & Ji, P. (2014). Make-or-buy service capacity decision in a supply chain providing after-sales service. *European Journal of Operational Research*, *239*(2), 377–388. https://doi.org/10.1016/j.ejor.2014.05.035
67. ’Mallick, K., & ’Palanisamy, K. (2023). *India: Sales of Electric Cars - March 2023*. https://www.pluginindia.com/blogs/india-sales-of-electric-cars-march-2023
68. *Modern Electric, Hybrid Electric, and Fuel Cell Vehicles, Third Edition*. (2018). CRC Press. https://doi.org/10.1201/9780429504884
69. Mukesh, & Narwal, M. (2023a). Predicting consumer purchase intention on electric cars in India: Mediating role of attitude. *Business Strategy & Development*, *6*(4), 942–956. https://doi.org/10.1002/bsd2.289
70. Mukesh, & Narwal, M. (2023b). Predicting consumer purchase intention on electric cars in India: Mediating role of attitude. *Business Strategy and Development*, *6*(4), 942–956. https://doi.org/10.1002/bsd2.289
71. Perry Hinton, D., Hinton, P. R., McMurray, I., & Brownlow, C. (2004). *SPSS Explained*. Taylor & Francis. https://books.google.co.in/books?id=5iyDAgAAQBAJ
72. Raimondo, M. A., Miceli, G., & Costabile, M. (2008). How relationship age moderates loyalty formation: The increasing effect of relational equity on customer loyalty. In *Journal of Service Research* (Vol. 11, Issue 2, pp. 142–160). https://doi.org/10.1177/1094670508324678
73. Rippé, C. B., Weisfeld-Spolter, S., Dubinsky, A. J., Arndt, A. D., & Thakkar, M. (2016). Selling in an asymmetric retail world: perspectives from India, Russia, and the US on buyer–seller information differential, perceived adaptive selling, and purchase intention. *Journal of Personal Selling and Sales Management*, *36*(4), 344–362. https://doi.org/10.1080/08853134.2016.1215923
74. Rubio, N., Oubiña, J., & Villaseñor, N. (2014). Brand awareness-Brand quality inference and consumer’s risk perception in store brands of food products. *Food Quality and Preference*, *32*(PC), 289–298. https://doi.org/10.1016/j.foodqual.2013.09.006
75. Sasmita, J., & Mohd Suki, N. (2015). Young consumers’ insights on brand equity: Effects of brand association, brand loyalty, brand awareness, and brand image. *International Journal of Retail and Distribution Management*, *43*(3), 276–292. https://doi.org/10.1108/IJRDM-02-2014-0024
76. Slegh, D., & Luong, A. (2014). Hedonic product discounts: When is the price right? *Nankai Business Review International*, *5*(4), 356–364. https://doi.org/10.1108/NBRI-03-2014-0018

77. Suh, J. C., & Yi, Y. (2006). When brand attitudes affect the customer satisfaction-loyalty relation: The moderating role of product involvement. *Journal of Consumer Psychology*, *16*(2), 145–155. https://doi.org/10.1207/s15327663jcp1602_5
78. Tromaras, A., Aggelakakis, A., & Margaritis, D. (2017). Car dealerships and their role in electric vehicles' market penetration-A Greek market case study. *Transportation Research Procedia*, *24*, 259–266. https://doi.org/10.1016/j.trpro.2017.05.116