

Role of Artificial Intelligence in Influencing the Purchase Intentions of Electric Vehicles Among the Consumers

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Abstract - In the present scenario, increased Artificial Intelligence integration in the automotive sector has changed the dimensions of consumer decision-making, especially in the context of EV adoption. AI-driven applications, such as intelligent recommendation systems, virtual assistants, data-driven personalization, and predictive analytics, have better facilitated consumers' access to information, reduced uncertainty, and infused purchase-related evaluations. The case is particularly relevant in India, where EV adoption remains at its incipient stage despite increased environmental concerns and supportive policy initiatives. This paper examines the role of Artificial Intelligence in shaping consumer perception and behavioural response and, thereby, also investigates its influence on purchase intentions for electric vehicles amongst Indian consumers. A structured questionnaire survey was administered to 405 respondents residing in Coimbatore city, India, all of whom possessed valid driving licences. The sample included both current EV users and prospective adopters intending to purchase an EV soon. Descriptive statistics and inferential analytical techniques, including Independent Sample t-tests and Multiple Regression Analysis, were employed to assess the impact of AI-driven factors on consumer perception, perceived behavioural influence, and purchase intention. Findings uncovered a significant positive association between consumer perception, perceived behavioural influence, purchase intention, and electric vehicles using artificial intelligence. Additionally, this study revealed a significant positive impact of artificial intelligence factors on consumers' purchase intentions, emphasizing the pivotal role of artificial intelligence in replaying a significant risk-reduction and decision-making confidence-enhancing effect in the adoption of electric vehicles.

Key Words: Artificial Intelligence, Electric Vehicles, Purchase Intention, Consumer Perception, Consumer Behaviour

1. INTRODUCTION

The mass adoption of electric cars has been identified as an important step towards overcoming significant environmental problems such as air emissions, the usage of fossil fuels, emissions of greenhouse gases, and global warming. In view of the significant impact of electric cars, governments around the world have designed various incentives to encourage the usage of electric cars (Zimm, 2021). In the current situation in India, due to the growing urbanization of the country, which has increased the concentration of cars, the government has

designed various plans to adopt electric cars. However, the speed of the adoption of electric cars has been limited.

From previous studies, it appears that consumers are more inclined to switch from conventional vehicles, which run on internal combustion engines, to electric vehicles if the electric vehicle performs equally or better in driving range, operating costs, cost savings, as well as overall driving experience (Agassi, 2009). However, the high costs associated with electric vehicles, driving range anxiety, lack of charging infrastructure, as well as a lack of reliable information, respectively, are some reasons which have, thus far, slowed their adoption in developing countries. Recent developments in Artificial Intelligence (AI) have ushered in new paradigms that could impact the decisions made by consumers in complex and high involvement products such as the automobile. AI-based advancements in intelligent recommendation tools, virtual assistants, digital marketing tools, predictive analytics platforms, and intelligent decision-support systems have the effectiveness to nullify the asymmetry of information about electric vehicles and alleviate the risks associated with the adoption of EVs. Though the issue of using AI in influencing the choices made by consumers in electric vehicles has been empirically unexplored in the context of emerging economies such as India.

In light of this consideration, this research aims to explore the perceptions and behaviours of consumers towards AI-driven influence and uncover the variables by which consumers' purchase intentions of electric vehicles are driven by AI. Also, this paper leans on various existing theories concerning technology acceptance and behaviours to outline a systematic perspective on electric vehicle purchase intentions. Also, this paper aims to fill this research gap to help expand the current streams of knowledge concerning sustainable transportation and the digital era.

2. LITERATURE REVIEW

This research collects information based upon past studies, existing theory, recent publications, and related documents to serve as the source for the study as proposals for the topic.

Electric Vehicle Adoption and Purchase Intention

The electric vehicle has been widely investigated in the literature in the context of sustainability, energy security, and innovation. The literature shows that the main factor affecting the purchase intention of electric vehicles is the perceived benefits of EV in the reduction of environmental issues, ease of access, and driving range, in addition to the issues of reliability (Rezvani et al., 2015; Li et al., 2017). While there has been an

escalation in the attitude toward environmentally sustainable values, convenience and ease of access are the limiting factors in the widespread use of EV.

It has been noted by several researchers that purchase intentions are one of the most effective predictors of actual EV adoption, and thus the focal point in the study of EV consumer decision-making (Ajzen, 1991). Yet, the disparities in EV adoption rates across different regions indicate that the usual drivers of consumer intentions are not comprehensive, and the role of evolving technological factors, including Artificial Intelligence, should thus be explored.

Consumer Perception and Behaviour toward Electric Vehicles

Perception of the consumer has been identified as an important factor that determines the behavioural responses of consumers towards electric cars. Researchers have shown that purchase intentions have been affected by perception linked to its usefulness, usability, risk, and trust towards electric cars (Egbue & Long, 2012; Wang et al., 2018). A negative perception of range anxiety and uncertainties of long-term maintenance costs has caused a pause in purchasing.

Behavioural theory would indicate a reliance by consumers on certain sources of information that simplify and clarify the process in high-involvement products, like cars. Theoretical frameworks devised by the Theory of Planned Behaviour and Technology Acceptance Models have indicated that perceived control, attitudes, and subjective norms are important factors in decisions related to EVs (Ajzen, 1991; Davis, 1989). The ever-evolving dynamics in the way consumers react in digital spaces require the examination of the impact that intelligence is having on their perceptions and intentions.

Role of Artificial Intelligence in Consumer Decision-Making

Artificial Intelligence has been recognized as an influential paradigm in the marketing and consumption phenomenon in the context of utilizing data-driven individualization and the predictive properties of interaction. Chatbots, recommendation engines, virtual helpers, and machine learning algorithms have been demonstrated in various sectors (Huang & Rust, 2021) to improve the engagement and trust levels between consumers in the pre-and-post implementation phases. These tools help consumers in the sense that they filter data and aid in the reduction of cognitive load associated with choice.

In the automobile industry, AI applications help with virtual product demos, predictions for maintenance tasks, and product recommendations, all of which have an impact on the product evaluation and buying decision of consumers. Studies have identified that AI interactions have a profound effect on increasing perceptions of a system's utility and decision-making confidence, which are primary factors for purchasing intentions (Davenport et al., 2020).

Artificial Intelligence and Electric Vehicle Purchase Intention

A growing body of literature shows how AI-powered marketing and information systems have significantly impacted consumer awareness and attitudes toward electric vehicles. Personalized

digital content, AI-enabled comparison tools, and intelligent customer support systems nurture an environment in which perceived risks associated with EV performance, cost, and charging infrastructure (Verma et al., 2022) are minimized. AI helps increase transparency and the availability of information and reduces uncertainty, thereby positively influencing purchase intention.

In addition, AI-driven predictive analytics enable firms to predict consumer needs and develop offerings related to EVs to meet those needs, thereby ensuring better behavioural intentions and likelihood of adoption. While there are merits in conducting a study that incorporates AI into an EV purchase intention framework, empirical research in this specific area remains scant, especially within emerging economies like India, representing a critical research gap.

Theoretical Foundations and Research Gap

There have been extensive uses of theoretical models such as Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), and Theory of Planned Behaviour (TPB) to understand the acceptance behaviour related to technology. Such theories focus largely upon constructs such as perceived usefulness, ease of use, social influences, and perceived behaviour control related to purchase intention. Though these theories have been instrumental in understanding purchase intention, there has been no direct use of AI-related factors as independent variables related to the purchase intention of EVs.

Thus, the need emerges for an empirical study which assimilates the concepts related to Artificial Intelligence into the theories regarding human behavioural aspects in order to understand the purchase intentions pertaining to electric vehicles. This paper will focus on the impact of Artificial Intelligence on the perception and purchase intentions in the context of India.

3. OBJECTIVES OF THE STUDY

- 1) To understand the consumer perception of electric cars with respect to the AI-enabled characteristics such as environment, economy, efficiency of performance, and intelligence of the technology.
- 2) To examine the link between customer perception triggered by Artificial Intelligence, perceived customer behaviour, and purchase intention in relation to the acceptance of electric vehicles.
- 3) To identify and analyze the important factors of Artificial Intelligence influencing the consumers' purchase intentions of electric vehicles.
- 4) To measure the impact of consumers' perceptions and their perceived behavioural responses, developed through AI-enabled interaction, on their purchase intentions for electric vehicles.
- 5) To offer practical recommendations to electric vehicle manufacturers, marketers, and decision-makers on how Artificial Intelligence can be utilized to increase consumer engagement and expedite the adoption of electric vehicles.

4. HYPOTHESIS

The following hypotheses were used in relation to the literature review and objectives of the study:

H1: Consumers' perceptions regarding Artificial Intelligence-enabled attributes in electric vehicles are in a moderate zone, in terms of electric vehicle adoption.

H2: There are significant relations among AI-enabled customer perception, customer perception, and purchasing intention towards an electric vehicle.

H3: The effect of AI-powered consumer perception on buying intentions for the adoption of electric vehicles is positive.

H4: Customer perceived Behaviour affected by the interaction of Artificial Intelligence has a Positive influence on Purchase intention towards adoption by electric vehicles.

5. RESEARCH METHODOLOGY

The proposed research uses a quantitative methodology for the purpose of studying the significance of Artificial Intelligence-powered customer perception and customer behaviour in shaping purchasing intentions related to the adoption of Electric Vehicles among the citizens of the Coimbatore city in the state of Tamil Nadu, India. The methodology of this proposed research details the design of the proposed research along with methods of data gathering.

5.1. Research Design and Data Sources

This research uses both primary and secondary sources of data. Secondary sources of data were collected by using published research papers, reports, and other documents related to electric vehicles, Artificial Intelligence, as well as consumer behaviour. Primary sources of data were collected through a structured questionnaire which was developed based on the research plan and related literature.

5.2. Sampling Method and Sample Size

The purposive sampling method was used to identify the target population for this research who fitted certain specific criterions related to EV adoption. The target population for this research includes all people living in Coimbatore city aged between 31 and 50 years. This age group represents the majority of potential electric vehicle adoptees who can afford more education and income. In addition, they should own a valid driving license and evince a desire to adopt an electric vehicle.

A total of 450 questionnaires were distributed using both online and offline methods of surveying. These targeted both existing and non-existing users of EVs. After the screening and validation of the collected data, the responses were selected for analysis.

5.3. Research Instrument and Measurement of Variables

A structured questionnaire was designed after conducting a comprehensive review of literature related to previous studies. It consisted of five parts. In the first part, screening questions to check the eligibility of respondents to participate in the study. Following sections consisted of the index related to Artificial Intelligence-enabled Customer Perception (CP), Perceived Customer Behaviour (PCB), Socio-Economic Factors, and

Purchase Intention (PI) regarding the adoption of EVs. Responses to each item using the five-point Likert scale ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

5.4. Data Collection Methodology

To ensure that a wide audience was covered, data was collected using online and offline survey techniques. It was made known that the study was for academic purposes only, with confidentiality ensured.

5.5. Data Analysis Techniques

The data was coded for analysis using relevant statistical software. Descriptive statistics were used for description, and inferential statistical analysis, which consisted of Independent Sample t-tests, Multiple Regression Analysis, was used for analysis on the relationship between artificial intelligence customer perception, customer behaviour, socio-economic attributes, and purchase intention on electric vehicle adoption.

5.6. Limitations of the Study:

Despite the contributions of this research, there are certain limitations that are being pointed out in the following statements. Firstly, the reach of the research is limited to the city of Coimbatore in the Indian state of Tamil Nadu; therefore, the results may not be very generalizable across different regions of India.

Secondly, the study employs a cross-sectional design, enabling the capture of the perceptions, behaviours, and purchasing intentions of consumers within a single point in time. Relatedly, since the attitudes of consumers towards artificial intelligence technology and electric cars might be changing over time with advancements, the results of longitudinal studies might be more valuable.

Thirdly, the research uses self-reported information derived from a structured questionnaire. Such information may be prone to response bias or social desirability bias. In addition, common method variance may be a problem in this research. Stated purchase intentions could not necessarily lead to actual purchase behaviour.

Fourth, the proposed study considers some of the most important factors from the field of artificial intelligence that are involved in making the purchase intention for an EV, but not all the variables that can impact the decision, whether technological variables, infrastructural, psychological, and so on, are considered.

Finally, the purposive sampling method used in the study and the focus of the study on the age bracket of 31-50 years may limit the generalizability of the results. Other consumer groups that are below the targeted ages of 31-50 years may hold different views regarding the adoption of AI and EV technologies.

6. DATA ANALYSIS AND RESULTS

The analysis of the data was conducted in two phases. First, the use of descriptive statistics analysis was employed in the analysis of the data. In addition to this, the use of Reliability analysis was conducted through the utilization of SPSS software. Later, the use of inferential statistics analysis techniques, specifically Multiple Regression analysis, was employed in the validation of the conceptual framework.

6.1. Reliability of the Constructs:

The SPSS test concluded that, the overall reliability Cronbach's Alpha Coefficient for the entire 66 items is found to be 0.835, suggesting that the items have relatively high internal consistency and it is reliable for overall items in the questionnaire.

Table -1: Reliability test of the Constructs

Construct	Cronbach's Alpha	Items
Perceptions about Electric Vehicles (PEV)	0.713	4
Factors Influencing Purchase Intentions of EVs (FPI)	0.720	5
Purchase Intentions towards EVs (PIEV)	0.790	10
Consumer Behaviour towards EV Adoption (CBEV)	0.736	9

At the same time, the reliability Cronbach's Alpha Coefficient of each subscale is greater than 0.7, indicating that each subscale has good internal consistency. As it is stated that if Cronbach's Alpha Coefficient is more than 0.7, the questionnaire reliability is acceptable.

6.2. Descriptive Analysis on Sample:

The SPSS test concluded that: 75.6% of respondents were male, while 24.4% were female. The majority (42%) fell into the 31-40 age category, with 28% in the 21-30 age range. In terms of monthly income, the largest group comprises 51.1% of respondents earning between 25001-50,000 INR, followed by 24.4% earning more than 50,000 INR.

Regarding education, 52% were graduates, while only 1.3% had completed up to the advanced level. Occupation-wise, 71% were Private Employees, 8.9% were businessmen and remaining belongs to others category. In terms of Source of Information about EVs, 44.4% reported that social media plays a major role in disseminating information about EVs, followed by 22.2% with Word of mouth.

Table 2: Inferential Analysis of Customer Perception about Electric Vehicle (EVs):

Statements on Customer Perception about Electric Vehicles	Mean	SD	t-value	p-value
Perceived Usefulness of AI Features in EVs	4.61	0.488	66.516	0.000
Trust in AI-Enabled EV Technology	3.97	0.544	35.885	0.000
Risk Perception	3.52	0.627	16.790	0.000
Purchase Intention Based on AI Features	4.04	0.534	39.147	0.000

Since P value is less than 0.01, the null hypothesis is rejected at 1% level of significance. Hence the opinion regard to all the Statements on Customer Perception about Electric Vehicles is not equal to average level. Also, based on mean score,

Customers opinion regards to Perceptions about EVs is above average level.

Table 3: Inferential Analysis of Factors Influencing Customers Purchase Intentions of Electric Vehicle:

Factors Influencing Purchase Intentions of EVs	Mean	Std. Deviation
Environmental Concern	4.32	0.468
Economic Factors	4.17	0.452
Technological Advancements	3.81	0.492
Social Norms and Influence	3.97	0.406
Perceived Behavioural Control & Attitude	4.12	0.427

Based on mean score, Environmental Concern (4.32) is the most important influencing factor regarding Customers Purchase Intentions of Electric Vehicle, followed by Economic Factors (4.17) and Perceived Behavioural Control & Attitude (4.12) stands to be the third most influencing factors regarding EV adoption. Social Norms and Influence (3.97) and Technological Advancements (3.81) were found to be the least influencing factor of EV Adoption because of having less accessibility of Charging infrastructure and inadequate driving range of EVs for long - distance travel.

Table 4: Correlation matrix (Perceived Customer Behaviour, Customer Perception, Purchase Intentions)

Correlations				
		Customer Behaviour	Perceptions	Purchase Intentions
Customer Behaviour	Pearson Correlation	1	.528**	.627**
	Sig. (2-tailed)		.000	.000
	N	405	405	405
Perceptions	Pearson Correlation	.528**	1	.587**
	Sig. (2-tailed)	.000		.000
	N	405	405	405
Purchase Intentions	Pearson Correlation	.627**	.587**	1
	Sig. (2-tailed)	.000	.000	
	N	405	405	405

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

The correlation coefficient between Purchase Intention and Customer Behaviour is 0.627, which indicates 62% positive relationship and is significant at 1% level. Between Customer Perception and Purchase Intentions, the correlation coefficient is found to be 0.587, which indicates 58% positive relationship and is significant at 1% level and similarly the other factors are positively correlated with each other.

6.3. MULTIPLE REGRESSION ANALYSIS:

The study uses data to determine the influence of independent variable (Perceived Customer Behaviour, Customer Perception) on dependent variables (Purchase Intention) through multiple regression analysis.

- Dependent variable: Purchase Intention (Y)
- Independent variables: Customer Perception (X1)
Perceived Customer Behaviour (X2)

Table 5: Multiple Regression Analysis:

Variable	Unstandardized co-efficient		Standardized co-efficient	t - Value	P-Value
	B	Std. Error	Beta		
(Constant)	21.371	3.958	-	5.426	0.000
Customer Perception	0.631	0.046	0.545	13.779	0.000
Customer Behaviour	0.495	0.087	0.225	5.680	0.000

Note: R=0.627, R Square = 0.393, Adj. R Square = 0.390, Sig. F Change = 0.000

Customer Perception got highest Beta score = 0.545 and Customer Behaviour with Beta = 0.225, indicates that both the independent variables (X1, X2) would be positively influence the Dependent variable: Purchase Intention(Y). Also indicates, both Customer Perception(X1) and Customer Behaviour(X2) are making 39.3% of significant influence on Purchase Intentions towards EVs Adoption.

Sig. F Change value = 0.000 emphasize that the regression model is found to fit and P-Value of both independent variables (X1, X2) are founding to be 0.000 (p < 0.05). Hence, concludes that both the Variables X1 and X2 have significant impact on Purchase intentions.

The multiple regression equation is

$$Y = 21.371 + 0.631X1 + 0.495X2$$

7. DISCUSSION OF RESULTS

In this study, an empirical analysis was done regarding the factors indicated by artificial intelligence (AI) that shape the perceptions of consumers, perceived control of behaviour, and purchasing intention towards adopting electric vehicles (EVs). Strong evidence has emerged that information systems based on AI help shape the behaviour of consumers in adopting EVs.

The analysis of the outcome indicates that customer perception was found to be the key determinant of purchase intention, which confirms that AI-based services like recommendation tools, intelligent comparison engines, chatbots, and predictive tools have a major role to play in improving consumer perception about EV performance capabilities, economical discharge, and their positive effects. This confirms the Technology Acceptance Model (TAM) and Theory of Planned Behaviour (TPB) theory outlined above.

Moreover, customer behaviour perception factors, like AI-enabled decision support, immediate feedback, and behavioural nudges, were discovered to positively and significantly affect purchase intentions. The use of AI-enabled systems alleviates information asymmetry and risk perceptions by giving customers accurate information related to the availability of charge points, predicted ranges, and TCO. These results support existing research and confirm that AI positively impacts decision-making by engendering a sense of control for high-involvement decisions, like buying an electric vehicle.

Descriptive analysis and inferential analysis indicate that care for the environment is still the major determinant shaping the intention to purchase EVs. AI enhances this determinant by providing a clear graphical rendition of reduction in carbon footprint, improved energy efficiency, and sustainability. Despite this advancement in AI technology, technological determinants like charging point constraints and range anxiety still moderate this intention to adopt.

In sum, the regression analysis indicates that the model can account for a significant variance in the variance of purchase intention, thereby affirming that the perception and behaviour patterns of customers facilitated through AI are indeed major enablers for the adaptation of EV by the markets.

8. RESEARCH IMPLICATIONS

8.1. Theoretical Implications

There are multiple theoretical contributions for this study. Firstly, it extends the Theory of Planned Behaviour by introducing artificial intelligence as an enabling factor that reinforces the relationship between perception, control over behaviour, and intention to purchase. By confirming the impact of AI in an empirical study, it enhances current theories related to behaviour in terms of sustainable transportation.

Second, this work extends the existing literature on technology adoption and consumer behaviour by highlighting the abilities of AI decision support systems to address a high degree of cognitive effort and risk perception encountered in a real-world setting when making a purchasing decision. This piece fills an essential knowledge gap evident in most of the existing EV adoption studies, where the digital intelligence element of a decision was less explored.

Third, the study adds to the literature on marketing, sustainability, and artificial intelligence by providing empirical evidence of the relationship between the use of artificial intelligence in terms of personalization, predictive analytics, and pro-environmental consumption practice.

8.2. Managerial Implications

They provide practical insights for companies that produce, market, or provide EV technology. There is greater reliance on AI-based marketing intelligence services such as virtual assistants, recommendation systems, and prediction-based calculators for lowering costs for improved buyer trust and purchasing confidence.

Such platforms can now be leveraged to facilitate hyper-personalised communication regarding personal concerns related to the range, charging points, and overall economic advantages. By embracing AI interaction with their customers through websites, mobile apps, or showrooms, car companies can improve their overall conversion rates.

Strategically, the use of AI analytics can help firms with consumer segmentation, demand forecasting, and pricing analysis, making marketing more efficient. Secondly, the partnership between EV firms and the developers of the AI solutions can help hasten the pace of innovation in the area of customer education initiatives and after-sales services.

8.3. Policy and Societal Implications

Policymakers can derive the significance of using AI-powered digital awareness platforms for the promotion of EVs from this study. Policymakers can make use of AI technology to provide information on charging points, subsidies, and the effect of EV emissions on the environment, hence lowering the inhibitive effects of EV technology.

Moreover, the use of AI-based decision-support systems can be exploited in the framework of smart city projects with the intention of encouraging the use of sustainable modes of transportation. The findings indicate that policy intervention accompanied by the use of technology in transparency and accessibility has the potential to hasten the shift to low-carbon mobility.

9. CONCLUSION

This paper concludes that artificial intelligence plays an imperative role in shaping the purchase intentions of consumers towards electric vehicles through customer perception and perceived control behaviour. The data illustrates that AI-supported information systems have a significant impact on the confidence, attitude, and intentions of consumers regarding the adoption of electric vehicles. "Customer perception emerged as the most important factor, emphasizing the need for personalization, real-time information, and intelligent decision support through AI." While the factor of environmental concern remains strong for the usage of EVs, the application of AI has enhanced this factor by reducing the level of uncertainty involved in decision-making.

However, despite the significant potential offered by AI, the factors of a lack of charging infrastructure and range anxiety are still considered crucial hindrances, implying the need for collaboration between technology companies, car manufacturers, and the government. In general, this research contributes both in theory and in practice by positioning AI technology as a strategic enabler for sustainable consumer behaviour.

REFERENCES

- (1) Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179–211.
- (2) Davenport, T. H., Guha, A., Grewal, D., & Bress Gott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*, 48, 24–42.
- (3) Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- (4) Egbue, O., & Long, S. (2012). Barriers to widespread adoption of electric vehicles: An analysis of consumer attitudes and perceptions. *Energy Policy*, 48, 717–729.
- (5) Huang, M.-H., & Rust, R. T. (2021). Artificial intelligence in service. *Journal of Service Research*, 24(1), 3–22.
- (6) Li, J., Wong, Y. D., & Loh, H. T. (2017). Understanding EV adoption intentions: Integrating the diffusion of innovations and technology acceptance model. *Transportation Research Part A: Policy and Practice*, 95, 49–64.
- (7) Rezvani, Z., Jansson, J., & Bodin, J. (2015). Advances in consumer electric vehicle adoption research: A review and research

agenda. *Transportation Research Part D: Transport and Environment*, 34, 122–136.

(8) Verma, A., Sharma, M., & Singh, N. (2022). Influence of AI-enabled digital engagement on consumer purchase intention: Evidence from the electric vehicle market. *Journal of Retailing and Consumer Services*, 66, 102954.

(9) Wang, N., Liu, Y., & Yang, Z. (2018). Understanding consumer adoption of electric vehicles in China: Integrating environmental concern into the technology acceptance model. *Transportation Research Part A: Policy and Practice*, 109, 1–13.

(10) Zimm, C. (2021). Policy incentives and electric vehicle adoption: A global review. *Energy Policy*, 149, 112064.