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An Analytical Study on Consumer Behaviour and Electric Vehicle Acceptance Using Bibliometric and Data Visualization Tools

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Abstract

Increasing demand for sustainable transportation has led industry stakeholders and researchers to investigate EVs as a feasible alternative to traditional automobiles. Governments worldwide have devised tax incentives, subsidies, and harsher pollution laws to boost EV adoption. Recent advances in lithium-ion battery technology and charging infrastructure have made EVs more efficient and affordable, making them more appealing to customers. Academic papers on EV adoption, industry trends, consumer behaviour, and technology advancements have increased due to these changes. Despite growing research, EV adoption literature is still fragmented, encompassing charging infrastructure, government policy, battery performance, and customer preferences. Bibliometric study maps this research arena, revealing patterns, important authors, and theme evolutions. Scholars can discover knowledge gaps and recommend future study by analysing academic publications, citation networks, and research clusters. A rapid-changing area like EV adoption requires such an analysis since technical advances and legislative changes change market dynamics. Electric transportation is becoming increasingly important, thus understanding its research trajectory and core issues is crucial. By quantifying scientific literature, bibliometric analysis lets researchers evaluate publication patterns, citation impact, and collaboration networks. Our investigation identified key co-citation networks across journals and authors, prominent research institutions globally, and five critical themes and theoretical foundations regarding electric vehicle purchasing decisions. In light of the backdrop and the urgent necessity to enhance future mobility due to climate change, the promotion, development, and dissemination of knowledge in this domain is imperative

Keywords: Consumer Behaviour , Electric , Vehicle , Acceptance Data , Visualization , Tools

Introduction

Electric vehicles (EVs) are replacing internal combustion engine (ICE) cars in the global transportation industry, which is becoming more sustainable. Environmental concerns, battery technology advances, and strict government carbon emission laws promote this transformation. Over the past decade, major economies including the US, China, and the EU have led EV manufacturing and demand. The increased interest in EVs has led to substantial study on market trends, technology, and legislation. Despite advances, EV adoption is hindered by several factors, demanding a full bibliometric study to understand the research environment.

Increasing demand for sustainable transportation has led industry stakeholders and researchers to investigate EVs as a feasible alternative to traditional automobiles. Governments worldwide have devised tax incentives, subsidies, and harsher pollution laws to boost EV adoption. Recent advances in lithium-ion battery technology and charging infrastructure have made EVs more efficient and affordable, making them more appealing to customers. Academic papers on EV adoption, industry trends, consumer behaviour, and technology advancements have increased due to these changes. Despite growing research, EV adoption literature is still fragmented, encompassing charging infrastructure, government policy, battery performance, and customer preferences. Bibliometric study maps this research arena, revealing patterns, important authors, and theme evolutions. Scholars can discover knowledge gaps and recommend future study by analysing academic publications, citation networks, and research clusters. A rapid-changing area like EV adoption requires such an analysis since technical advances and legislative changes change market dynamics. Electric transportation is becoming increasingly important, thus understanding its research trajectory and core issues is crucial. By quantifying scientific literature, bibliometric analysis lets researchers evaluate publication patterns, citation impact, and collaboration networks. This study can bridge the knowledge gap between academia and business, aligning research with EV market issues and possibilities.

Researchers, policymakers, and industry stakeholders will benefit from a bibliometric analysis of EV adoption and market trends as the global automotive sector evolves.

EV adoption research has advanced, but the literature is extensive and diverse, making it hard to get a whole picture. Due to the rapid growth of academic publications, research on technology, legislation, infrastructure, and consumer behaviour are spread. The relationship between market trends and adoption variables is complicated and requires thorough study. Synthesising research, identifying essential themes, and identifying research needs requires bibliometric analysis. Without such an analysis, policymakers and industry executives may struggle to draw conclusions from the vast yet fragmented literature on EV adoption and market trends. A bibliometric analysis of electric vehicle adoption and market trends will give a comprehensive and quantitative overview of research in this sector.

Overview of Electric Vehicle Adoption

Over the past decade, experts have studied the market penetration of electric cars (EVs). Technology, legislation, and customer preferences drive EV adoption, according to studies. Government subsidies, charging infrastructure, and battery cost decreases affect EV spread, according to researchers. Strong official backing has accelerated adoption in certain locations, but infrastructural and economic obstacles limit acceptance in others. EV adoption has been studied using the Technology Acceptance Model (TAM) and Diffusion of Innovation (DOI) theories. These paradigms emphasise how perceived utility, simplicity of use, and social influence affect customer behaviour. Life cycle assessment (LCA) studies have shown that EVs can reduce greenhouse gas emissions compared to ICE cars.

Market Trends in Electric Vehicle Adoption

Policy incentives, technology advances, and consumer awareness have shaped EV adoption patterns. EV sales and manufacturing are rising quickly in China, the US, and Europe, according to recent studies. Cheaper battery technology like lithium-ion and solid-state batteries have made EVs more accessible and competitive. Additionally, public charging networks and battery range advances have reduced range anxiety among consumers. OEMs' influence on market trends has also been thoroughly explored. Tesla, Nissan, and Volkswagen have invested heavily in EV technology, increasing EV model availability across categories. Shared mobility options like electric car rentals and ride-sharing platforms have also encouraged EV adoption by giving customers another chance to experience electric mobility without ownership.

Policy and Regulatory Frameworks

Studies on market dynamics show that government initiatives accelerate EV uptake. Tax incentives, subsidies, and refunds have helped people buy EVs. With active EV promotion policies, Norway and the Netherlands have greater adoption rates than regions with lesser incentives. Carbon emission regulations and sustainable transportation policies have also affected the EV industry. Regulations including EU emission reduction objectives, China's NEV policy, and U.S. federal tax incentives for EV sales have affected market trends. Policies vary in efficacy, highlighting the necessity for a worldwide EV promotion strategy.

Technological Innovations and Battery Development

In battery performance and energy efficiency, EV research has focused on technology. Over the past decade, lithium-ion batteries, the main energy storage technology in EVs, have improved in energy density, charging speed, and cost. Solidstate batteries offer safety and lifespan, thus researchers have investigated them. Vehicle-to-grid (V2G) technology has also been studied for grid stability and renewable energy integration. Multiple studies have stressed the importance of quick, broad charging infrastructure for EV adoption. Wireless charging and ultra-fast charging stations are coming to minimise charging times and increase consumer comfort. Autonomous and connected car technology will enable smart mobility solutions and improve driving efficiency, shaping EV adoption.

Consumer Behavior and Adoption Barriers

EV adoption rates must be improved by understanding customer views. Perceived cost, range anxiety, and charging infrastructure availability influence purchase decisions, according to research. Social influence and

environmental consciousness also impact consumer preferences, with research demonstrating that pro-environmental customers are more inclined to buy EVs. EVs cost more than ICE vehicles, therefore economic obstacles are a key worry in emerging markets. Although battery prices are falling, affordability still limits broad use. Research shows that consumer education and awareness initiatives can remove EV performance and sustainability myths.

Objectives Of The Study

1. To study on Overview of Electric Vehicle Adoption
2. To study on Consumer Behavior and Adoption Barriers

Literature Review

Lingzi Jin, Peter Slowik (2017), In the article "Electric Vehicles Consumer Awareness," published in the journal "The International Council on Clean Transport. This analysis aims to comprehensively assess consumer awareness of electric cars and to examine government initiatives promoting their commercial adoption.

Mr. Nattpon Dolcharumanee (2018), In the study titled “Factors Affecting the Decision for Purchasing Electric Vehicles,” published by Bangkok University. This reviewed article aims to elucidate the different variables influencing the choice to purchase electric vehicles, including pricing, availability, after-sales service, vehicle aesthetics, charging infrastructure, battery efficiency, and distinctions between plug-in and non-plug-in charging options.

Mrinal Pandey, Midhun Mohan, Dr. Subha (2021), in the paper "Customer Perception Towards Purchase Intention" published in the "Journal of Emerging Technologies and Innovative Research (JETIR) The aims of this journal are to ascertain consumers' purchasing intentions and to identify the factors influencing these intentions for electric vehicles, as well as to evaluate the influence of environmental advantages on their purchasing decisions.

Gabriel Pedrosa and Helena Nobre (2019) An paper titled “The Influence of Consumer Mobility Concerns on Electric Vehicle Adoption” was published in the journal “World Review of Intermodal Transportation Research.” Historically, people have consistently preferred cars that offer superior comfort, favouring traditional fuel-powered vehicles over electric ones, which are perceived as more complex to operate and drive.

Criag Morton (2011) Article titled “Electric Vehicles: Will Consumers Become Enthusiastic?” Presented in the conference proceedings. The aims of this revised conference paper are to understand customer purchasing intentions based on the market's transition from stock to electric.

Ouyang et al. (2024) Analysed the effects of diverse policies on electric vehicle adoption and determined that sustained government incentives, including tax credits and zero-emission standards, are crucial for fostering adoption. California's mandate for all new vehicles to be zero-emission by 2035 has been recognised as a crucial initiative for expediting adoption.

Shakeel et al. (2022) Performed comprehensive research and discovered that social variables, including peer influence and environmental consciousness, substantially impact customer choices for electric vehicles. Their findings indicate that advocating for electric vehicles as socially desirable can expedite adoption.

Li et al. (2023) Examined the impact of subsidy reductions on electric vehicle adoption in metropolitan vs smaller urban areas. Their investigation revealed that affluent cities are less impacted by subsidy reductions due to higher earnings, which enhance the affordability of electric vehicles even without financial incentives. Conversely, economically disadvantaged communities experience a significant reduction in adoption rates when subsidies are eliminated. This underscores the significance of geographically targeted measures to provide universal access to electric vehicles, such as maintaining subsidies in economically disadvantaged regions.

Souvik et. al. (2022) decided to investigate how people feel about EVs. Based on their analysis of primary sources, it appears that the electric vehicle industry is thriving, with promising future prospects and a massive market share, thanks to the significant improvements in product quality that have occurred since the EV revolution in India began.

Tushar (2021) analysed primary data to determine how Vadodara city residents feel about e-vehicles. Consumers do not favour E-vehicles as their main mode of transportation, according to his research.

Margret and Sydney (2021) investigated customer habits in relation to the purchasing of electric vehicles: Using primary data, do a study gap analysis. According to the research they looked at, PEVs are becoming more popular as a substitute for LDVs that use conventional fuels. While many mainstream mass-market buyers are still unsure about whether PEVs are suitable for their driving needs, the majority of PEV purchases are early adopters from urban, wealthy neighbourhoods, and most states follow California's Zero Emissions Vehicle legislation.

Silvana et. al. (2021) investigated the habits of people who buy electric vehicles: Producing a field map and research plan based on primary sources of information. Using bibliometric and thematic analytic methods, this study investigates how electric vehicle market consumers behave. In terms of consumer traits, theories, context, and methods, it provides direction for scholars in the future.

Research Methodology

This study employed a bibliometric and data visualisation research approach to analyse the progression of research on consumer behaviour and electric vehicle (EV) acceptance. Bibliometric analysis was utilised to discern publishing patterns, significant authors, notable journals, leading nations, and principal research subjects. Data visualisation methods were employed to illustrate and analyse the bibliometric results using graphical representations and network diagrams. The literature review approach enables researchers to conduct thorough and dependable analyses of scientific sources (Hulland & Houston, 2020; Paul, Merchant, et al., 2021). Various scientific review methodologies are available, including theme-based reviews (Paul & Feliciano-Cestero, 2021), framework-based methodologies (Xie et al., 2017), theory-driven reviews (Xie et al., 2017), reviews focused on theory development (Paul & Mas, 2020), hybrid types (Dabić et al., 2020), and bibliometric analyses (Ruggeri et al., 2019). The authors assert that, in light of the research gap, bibliometric analysis should be integrated with a comprehensive theme analysis while adhering to a stringent and methodical research process (Furrer et al., 2020). This amalgamation of methodologies will enable us to authenticate bibliometric variables including authors, citations, keywords, and countries of publication, facilitating theme analysis derived from the chosen literature (Paul, Lim, et al., 2021; Secinaro, Dal Mas, et al., 2021; Zupic & Cater, 2015). Additionally, to enhance the reliability and replicability of the research findings, the authors employed the TCCM framework. Consequently, the concluding part examines the consequences comprehensively to formulate future research enquiries aligned with the aforementioned paradigm (Chakma et al., 2021). The study was further enhanced by the research contributions of Paul and Criado (2020) and Paul et al. (2021), enabling researchers to use a hybrid research technique centred on future dimensions. Massaro et al. (2016) and Secundo et al. (2020) indicated that to examine the literature on consumer and customer behaviour about electric vehicles (EVs), the researchers employed five methodical procedures:

1. Defining RQs

2. Writing of the research protocol

3. Definition of the research sample for analyses

4. Development of codes for analysis

5. Critical analysis, discussion, and identification of a future research agenda

The authors validate the study of the research procedure in light of the present and expanding research trajectory of Massaro et al. (2016). This study employed bibliometric and thematic analysis to mitigate the subjectivity of the results (Dumay, 2014; Paul, Lim, et al., 2021; Zupic & Cater, 2015). This study utilised Scopus, the preeminent citation database for peer-reviewed literature, to ascertain the selection for literary analysis on the subject matter. As stated by Okoli (2015) and Mongeon and PaulHus (2016), it is a multidisciplinary database appropriate for management researchers, with a greater quantity of indexed journals than the Web of Science. Two researchers separately evaluated the two databases to confirm that no substantial and pertinent sources were overlooked despite these findings (de Bem Machado et al., 2021). Ultimately, our analysis of Scopus and Web of Science aligns with the findings of Bramer et al. (2017), which indicated that Scopus retrieved 100% of the references

contained from Embase or Web of Science in 52% of the results. The analysis examines 'Consumer* behaviour' OR 'Customer* behaviour' OR 'Buyer*' AND 'Electric car*' OR 'Electric vehicle*' as connected by the boolean operator. Alongside the essential terminology foundational to the study, the authors employed 'buyer*' interchangeably with consumer and customer, as proposed by Arora and Chakraborty (2021). The study encompasses many inclusion and exclusion criteria. The search criteria discovered publications published from 1980 to 2021, encompassing scientific articles but excluding non-peer-reviewed articles, novels, book chapters, and conference proceedings (Arun et al., 2021; Vlačić et al., 2021). This research acknowledged the nascent phase of the literature by examining findings from all peer-reviewed publications that employ a peer-reviewed editing procedure (Massaro et al., 2016).

The research analysed findings from 267 peer-reviewed publications. Ultimately, we scrutinised just English publications (Mariani & Borghi, 2019; Secinaro et al., 2020) and implemented all prior restricted search parameters, resulting in the selection of 258 articles for analysis. Furthermore, four items identified by the draw may be unavailable. Consequently, the total number of articles analysed is 254. Moreover, the technique aligns with the SPAR-4-SLR criteria established by Paul, Lim, et al. (2021), hence fulfilling the data curation requirements outlined by Radu-Lefebvre et al. (2021). Figure 1 provides the information necessary to ensure the reliability and replicability of our investigation. Subsequently, by examining the chosen articles that influence the analytical domain, we start the process of selecting the most often referenced pertinent articles to eliminate the risk of excluding research located in alternative databases. This research employs bibliometric analysis to mitigate bias in data selection by emphasising quantitative evaluation, hence assisting researchers in identifying crucial and pertinent papers (Centobelli et al., 2020). This research employs the snowball sampling validation method alongside the citation strategy. This methodology enabled the researchers to confirm the existence of the most pertinent research sources absent from the Scopus dataset inside the studied sample. Subsequently, code analysis enabled the researchers to corroborate the findings acquired from Scopus. The research questions enabled us to delineate the systematic course of enquiry. The investigation concentrated on three main areas: co-citation analysis to examine author structure, geographical analysis, and thematic analysis. The subsequent paragraphs include evidence of the analytical procedures undertaken.

Co-citation analysis

Co-citation analysis (Small, 1973) is a bibliometric method designed to delineate a topic's structure by examining works that are referenced concurrently (Cobo et al., 2011). This technique facilitates the identification of significant links among writers, although it primarily examines historical research topics, focusing more on previous contributions than on contemporary ones (Van Eck & Waltman, 2009). Nonetheless, the approach efficiently offers a comprehensive perspective on the particular area of research (Ruggieri et al., 2018)

All articles inside the cluster were utilised to generate a map pertinent to the study subject. The dataset was further analysed using VosViewer software, yielding the weighted total of the squared distances between all pairs of articles based on their similarity (Van Eck & Waltman, 2009). This technique enabled the identification of the conceptual foundations of distinct study subfields.

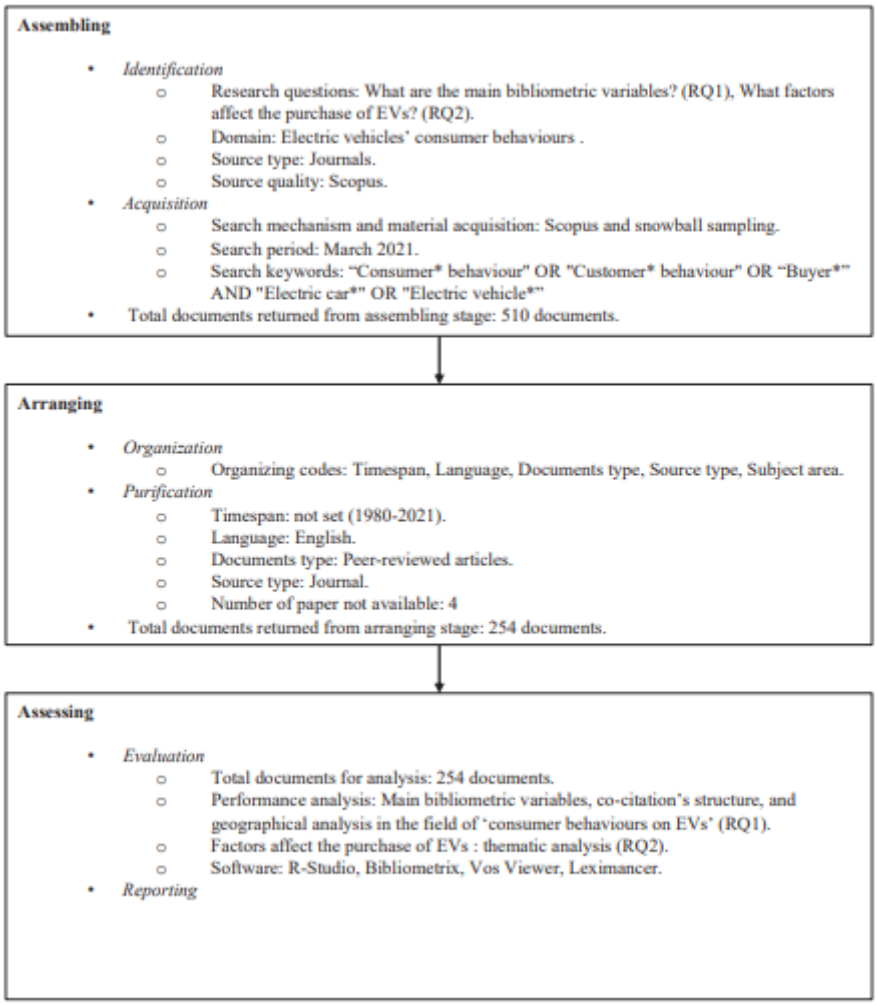

Fig. 1. SPAR-4-SLR protocol. Source: Author's elaboration on Paul, Lim, et al. (2021).

Keywords analysis

Keywords analysis is a bibliometric method that facilitates the examination of the core content of chosen publications (Guo et al. 2019), hence allowing the identification of significant terms within a research domain and their co-occurrences. The annual analysis allows the identification of the most frequently utilised keywords by researchers within a certain timeframe (Aria & Cuccurullo 2017; Guo et al. 2019).

Geographical analysis

The authors used Bibliometrix, a statistical programme in R-Studio (Aria & Cuccurullo, 2017), to acquire geographic information on the relational flows between countries and the most significant contributing nations on the subject. The programme gathers bibliometric data, encompassing authors, citations, countries of origin, and keywords. The Biblioshiny online interface was utilised to generate an idea map and citation network. The data from Donthu et al. (2020) about international relationships is reliable for identifying the regions where the issue is most extensively addressed and for analysing potential correlations between authors' contributions and interest in the subject.

Thematic analysis

Thematic analysis of documents identified through text mining constitutes a form of unstructured ontological research aimed at exploring intricate concepts by focusing on the language employed by authors, thereby facilitating a systematic, objective, and evidence-based review of the literature (Biesenthal & Wilden, 2014). The qualitative content analysis of the selected sample facilitates the examination of many sources, including written

texts (Elo & Kyngas, 2008). Researchers get advantages from utilising advanced software technologies to conduct in-depth analyses of research streams (Krippendorff, 2018).

The cluster of papers found via the keywords in the methodology's general section was analysed using Leximancer 4.0 software to achieve these objectives and conduct a narrative enquiry of the subject field (Sowa, 2000; Stubbs, 1996). The study seeks to provide a conceptual mapping that demonstrates a strong correlation with expert perspectives (Campbell et al., 2011; Rooney, 2005). Randhawa et al. (2016) assert that the software is suitable for exploratory research due to its high reliability and reproducibility in concept extractions and thematic clustering, effectively addressing expectation bias issues inherent in manually coded text analysis and expert-based systematic reviews.
In summary, Leximancer facilitates the decoding and visualisation of the structure of intricate textual data, such as that commonly employed in dynamic search (Forliano et al., 2021). The analysis facilitates the conceptualisation of primary subjects within the given sample by finding the links between words and the occurrences of structurally related phrases (Massaro et al., 2021). Consequently, it serves as a suitable instrument for examining the fundamental topics of consumer behaviour in the domain of electric vehicles.

Results and findings

This section examines the findings on consumer and customer behaviour about electric vehicles, addressing RQ1: What are the primary bibliometric variables, co-citation structures, and geographical analyses in the domain of 'consumer behaviours regarding electric vehicles'?

The initial sub-section is to provide the findings of the cocitation analysis conducted with VosViewer. The second examines the subject regionally utilising Bibliometrix. The third section delineates the theme analysis conducted utilising Leximancer software.

This section offers a comprehensive summary of the study domain under examination and addresses the research questions. Table 1 presents 254 publications published from 1983 to 30 March 2021. Notably, there has been a substantial escalation in discourse about the subject since 2017, when the EU articulated its ambition to emerge as a global leader in decarbonisation (European Commission, 2017). The initial publication of 1983 is noteworthy as, despite the lack of electric vehicles in the market, scholarly discourse began to scrutinise the topic from that year, stimulated by NASA's applied research on electric batteries in the United States. Consequently, the preliminary discourse directed the argument towards addressing subpar battery performance by pinpointing three critical elements influencing future consumers' purchase decisions: range, performance, and cost (Schwartz, 1983). Following the initial publishing phase, academics shown a revived interest in the topic just in 2007.

Table 1 Main information about data.

Description	Results
Timespan	1983–2021
Number of Journals	116
Peer-reviewed Articles	254
Average Citations per Document	30.26
Average Citations per Year per Document	4.738
References	12,107
Keywords Plus (ID)	1,682
Author Keywords (DE)	796
Authors	679
Author Appearances	827

Authors of Single-authored Documents	25
Authors of Multi-authored Documents	654
Documents per Author	0.38
Authors per Document	2.63
Co-authors per Document	3.21
Collaboration Index (CI)	2.81

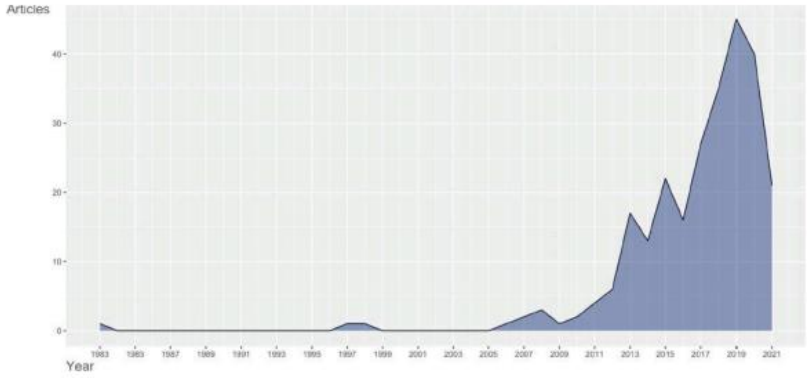

Fig. 2. Annual scientific production Source: Author's elaboration using Bibliometrix.

A total of 796 keywords were utilised, indicating that the topic was analysed from several viewpoints. Furthermore, the term "keywords plus," indicating the frequency of keywords in an article's title, is nearly tenfold the total number of articles. According to the authors' index per publication, each piece was authored by an average of more than two individuals (2.81). The search included 679 authors, with an average of 30.24 citations per publication. The average number of citations is notably low, suggesting a restricted interest in the subject throughout the specified timeframe.

Co-citation analysis

Co-citation analysis enables scholars to examine instances where many publications and writers concurrently acknowledge the same scientific contribution (Small, 1973). Figure 3 examines the co-citations of articles across several publications. It is noteworthy to identify at least three primary clusters of interest within the study subject. The green and blue regions have the International Energy Policy Journal at the core, focusing on the effects of energy supply and usage policies. The journal is crucial for researchers in 'Transportation Research Part A: Transport and Environment' and 'Transportation Part D: Policy and Practice.'

Furthermore, there are several creative additions to the buying intents of electric automobiles (Axsen & Kurani, 2013). The green node predominantly encompasses journal articles relevant to electric vehicle purchasing choices. The Nature Energy Journal is included among sources that encompass distributed energy resources for electric vehicle customers and transmission infrastructure.

The authors identify an additional node of hybrid co-citation (in red and yellow) among the journals addressing the sustainability of electric vehicles in comparison to conventionally powered automobiles and decisions on transport subsidies. The analysis identifies the Journal of Cleaner Production, Sustainability Journal, and World Electric Vehicle Journal as significant sources of publications concerning sustainable choices, particularly those informed by the Theory of Planned Behaviour (TPB) and factors influencing the purchase of electric vehicles (EVs) (Adnan et al., 2017; Asadi et al., 2021; Carlucci et al., 2018).

Ultimately, Fig. 3 illustrates the lack of co-citations across leading journals in the field of marketing (AJG, 2021). This feature is further reinforced by following data that illustrate the scientific interest of researchers now confined to sustainability and transportation modification strategies.

Figure 4 presents evidence of co-citations among writers. All writers are integrated into a well-organized network primarily focused on four domains.

The red area, addressing the influence of customers on electric vehicle purchases, prominently features the work of Axsen and Kurani (2013), which surveys driver preferences among petrol, hybrid, plug-in hybrid, and fully electric vehicles. Axsen and Sovacool (2019) investigated users' views of electric vehicles within the same study framework.

The green sector include research on vehicle efficiency and sustainable consumption practices. Skippons' (2014) contributions present a compelling enquiry on superior electric vehicle performance compared to conventional models. Jansson et al. (2017) offer a compelling analysis of sustainability factors, encompassing standards and automotive manufacturer leadership.

The blue region of co-citation represents the authors' most limited scope of application models designed to estimate break-even points for gasoline and electric vehicle systems (Liu & Santos, 2015) and prediction models for consumer purchase behaviour (Wang et al., 2016).

Ultimately, the yellow/purple region identifies a robust cluster of co-citations supporting the work of Franke et al. (2017) about customer happiness related to the maximum mileage range of electric vehicles.

Co-keywords analysis

This section examines the associations and co-occurrences of the terms utilised by the writers of the chosen sources (Guo et al., 2019; Secinaro, Calandra, et al., 2021). The authors demonstrated the search clusters related to EVs by employing term co-occurrence, establishing a threshold of 10 items. This yielded four search clusters, 1,121 links, and 58 objects in the visualisation. Figures 5 and 6 illustrate the keyword network based on co-occurrence analysis and the keyword overlap alongside co-occurrence and average publishing scores per annum, respectively.

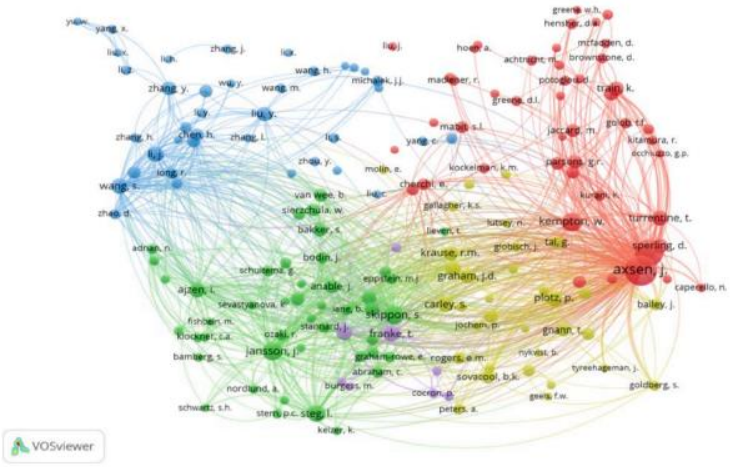

Fig. 4. Co-citation of authors Source: Author's elaboration using VosViewer.

Figure 5 depicts a collection of co-occurrences represented by circles of keywords, with size indicating strength; larger keywords signify greater prominence within the search thread. Moreover, the identical hue signifies a search cluster, representing a categorisation of like subjects. The findings indicate four primary groupings. In the green cluster in the upper left, terms including carbon emission, emission control, energy efficiency, sustainability, and innovation pertinent to 'environmental sustainability' are present. The yellow cluster at the top and centre contains phrases such as gas emissions, competition, and charging infrastructures, emphasising the research topic of transport infrastructures for electric vehicles (EVs). The blue cluster on the right highlights themes including costs, commerce, charging (batteries), and decision-making, with research articles mostly focused on exploring the interrelation between costs, car sales, and the function of batteries. The red cluster on the left encompasses topics including sales, purchasing, perception, preference behaviour, and secondary batteries, with a focus on sales and customer preferences. Additionally, various hues denote the co-occurrences of terms across time, ranging from

2016 (depicted in dark purple) to 2018 (shown in yellow) in Fig. 6. In recent years of publishing, the most often utilised terms are gas emissions, technological adoption, and purchase. The preceding numbers, while typical, may mislead the reader. Consequently, Table 2 and Figure 7 depict the progression of keywords from 1983 to 2021.

Initially, the writers focused solely on the themes of 'EV' and 'plug-in,' with articles subsequently transitioning to encompass physical transportation and the presentation of EVs. Since 2014, consumer behaviour has emerged as a significant subject (Skippon, 2014). The topic's novelty heightened academics' interest in survey research about customers and their preferences for new automobiles. Concurrently, the domain of renewable energy research has expanded. Secinaro et al. (2020) assert that for electric vehicles to be sustainable, their energy chains must accommodate the increasing energy consumption.

Subsequently, consumer behaviour increasingly captured the attention of researchers. Numerous papers subsequently concentrated on examining climate change and the transportation sector's contribution (Brady & O'Mahony, 2011; C. Li et al., 2015). During this period, the discourse on energy management was mostly focused on articulating the EV battery disposal issue for the first time (Kampker et al., 2016).

Current research continues to concentrate on the advancement of electric vehicles, emphasising the sustainability of their environmental effect (Canals Casals et al., 2016). Nonetheless, significant difficulties arise, including the capacity to satisfy the increasing demand for such cars among worries over energy sustainability (Axsen & Kurani, 2013a). Lastly, an emerging domain is consumer acceptance, which is informed by first consumer experiences across many nations globally (Jaiswal et al., 2021).

Methodological analysis

This chapter examines the methodologies employed by authors in the selected publications to elucidate how the researchers analysed the phenomena (Secinaro, Dal Mas, et al., 2021; Zaheer et al., 2019). Table 3 illustrates the most often employed strategies. It is evident that 60.82% of quantitative studies may be classified, which utilise model development (Benzidia et al., 2021; Ning et al., 2020) and regression analysis (Liu et al., 2019; Wang et al., 2020). Mixed techniques, which integrate quantitative and qualitative research, are employed in 14.69% of cases (Bailey & Axsen, 2015; Bennett, 2015). Furthermore, 13.06% use qualitative approaches utilising case studies. It indicates that only a limited number of studies have grounded their study on consumer behaviour utilising non-numerical data (Lopes et al., 2014; Thiel et al., 2020). The findings indicated that 10.61% of action research, influenced by the sample's multi-disciplinary characteristics, used experiments to comprehend energy consumption arising from the installation of electric vehicles (Akin et al., 2012; Harré & Bossomaier, 2014). Ultimately, literature studies pertain to EVs, energy conservation techniques, and business models by a little 2.45%, hence affirming the uniqueness of this scientific investigation (Axsen & Sovacool, 2019; Rezvani et al., 2015). The prevalence of conceptual articles and commentary seems minimal.

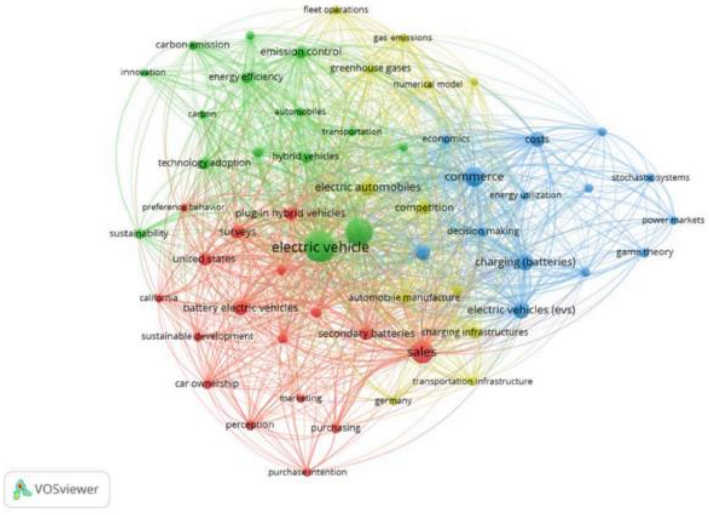

Fig. 5. Co-keywords network. Source: Author's elaboration using VosViewer.

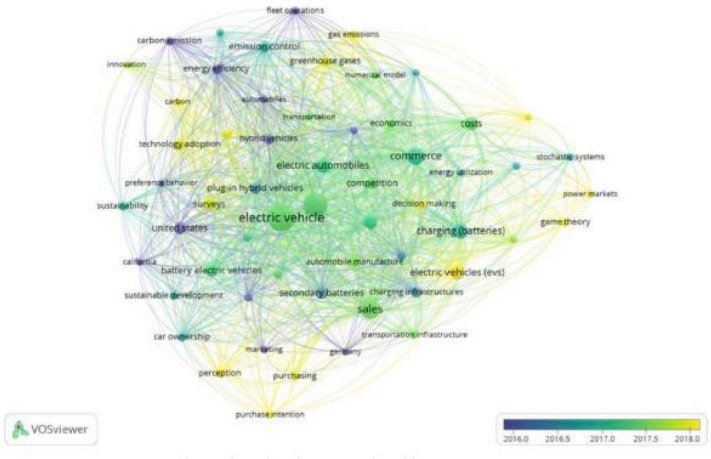

Fig. 6. Co-keywords overlay. Source: Author's elaboration using VosViewer.

Table 2 Co-occurrence keywords

Ranking Order	Keywords	Cluster Number	Links	Total Link Strength	Occurrences	Average Publication Year
1	Electric vehicle	2	57	702	130	2017
2	Consumer behaviour	2	57	508	97	2017
3	Sales	1	57	394	66	2017
4	Charging (batteries)	3	51	202	37	2017
5	Plug-in electric vehicles	3	52	199	31	2017
6	Battery electric vehicles	1	48	209	31	2017
7	Carbon emissions	4	48	209	31	2017
8	Costs	3	46	169	31	2017
9	Purchasing	1	34	82	14	2018
10	Decision making	3	37	65	13	2018

Geographical analysis

Country total of articles

This section assesses the nations that significantly contribute to the academic discourse on the subject and their dynamics: Figure 8 illustrates the consideration of nations' customer behaviour regarding electric vehicles. The United States is the most productive nation on the subject, with 137 published pieces. China adheres to (100), wherein researchers investigate customer behaviour and intents to promote electric vehicles, hence mitigating pollution and endorsing sustainability measures.

Alongside the United Kingdom (35), the subject is pertinent in Canada (31) and Europe, where Germany (30) and Portugal (14) are the countries most engaged in understanding the issue, especially regarding market alterations (Plotz et al., 2014) and battery utilisation (Franke et al., 2017). South Korea is positioned centrally (24). Figure 5

illustrates that several regions have yet to participate in the scientific discourse. Notably, with the exception of Saudi Arabia (4), there has been little discourse on the subject among the principal oil-producing nations in the Middle East.

Table 3 Methodology analysis.

Research Method	Percentage (%)
Quantitative	60.82
Mixed Methods	14.69
Qualitative	13.06
Action Research	10.61
Literature Review	2.45
Conceptual	0.41
Commentary	0.41

Country publications and collaboration map

The results pertain to consumer behaviour about electric vehicles in one or more publications from each country, demonstrating the connections across nations. Table 4 indicates that Norway, Switzerland, Sweden, and Germany have achieved a greater average number of citations compared to other nations. Conversely, the USA, Germany, Canada, and China own a greater quantity of citations. Certain nations with same total and average citations are nevertheless anticipating greater significance in the future. Figure 9 illustrates the map of worldwide partnerships. The blue tint on the map signifies scientific collaboration across countries. Furthermore, the states' pink border signifies the degree of collaboration among writers. The data indicates that the strongest partnership exists between China and the USA, as well as between the USA and European nations, including Germany and Spain. The initial connection pertains to a shared interest in formulating new environmental policies concerning sustainable mobility (Axsen & Kurani, 2013b; Xu & Su, 2016); the subsequent link arises from the geographical proximity of the nations and their political decisions regarding the matter (Matthews et al., 2017). The relationship between China and the UK is significant owing to the academics' mutual interest in enhancing their understanding of customer behaviour in the electric vehicle purchasing process (Küfeoglu et al., 2019; S. Wang et al., 2016).

Thematic analysis

This part presents the findings of the thematic analysis to elucidate the major themes and patterns influencing customer behaviour, addressing RQ2: What variables impact EV purchases?

The investigation has found Figure 10, which illustrates various essential topics like 'Consumer', 'Purchase', 'Market', 'Vehicle', and 'Electric Vehicle'. Furthermore, Fig. 11 (located at the conclusion of this section) delineates the positive and negative factors influencing consumer and customer behaviour, thereby establishing a theoretical framework that logically represents the findings obtained (Degirmenci & Breitner, 2017; Egbue & Long, 2012; Kumar & Alok, 2020; Liao et al., 2017; Secinaro et al., 2020). The framework evaluates the core ideas identified by Leximancer based on their frequency of occurrence and diminishes their significance according to the literature assessment outlined below. The study identifies four primary research clusters and numerous significant publications that have addressed this interesting area of enquiry in relation to the first research question. The investigation of the second research question identified three primary elements affecting purchase intentions: price consciousness, environmental concern, and customer perception and personality (Asadi et al., 2021; Yang et al., 2019; Yang & Tan, 2019). Furthermore, electric vehicle buyers possess an inherent affinity for technology, influenced by technical features and preferences related to socio-demographic traits, usage patterns, and social factors (Liao et al., 2017). A primary motive for purchasing an electric vehicle is its responsiveness to

environmental concerns. Nonetheless, there is concern over current battery technology and sustainable disposal and charging methods (Goebel, 2013; Robinson et al., 2014).

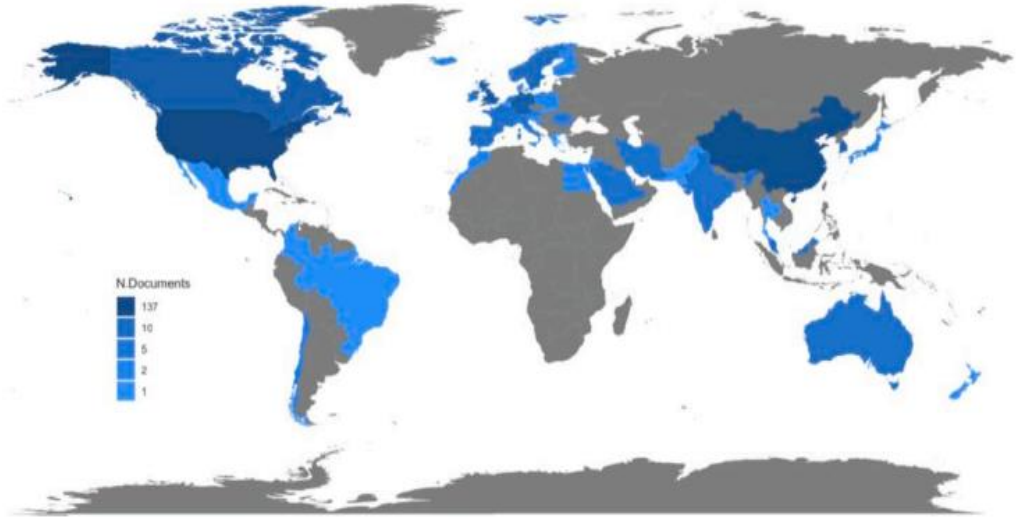

Fig. 8. Country scientific production. Source: Author's elaboration using Bibliometrix

Table 4 Country and their total number of citations.

Country	Total Citations	Average Article Citations
USA	2,034	39.11
Germany	1,062	62.47
Canada	1,001	55.61
China	699	15.20
Norway	360	60.00
Switzerland	284	71.00
Sweden	147	73.50
UK	126	10.50
Ireland	84	42.00
Malaysia	64	21.33
Netherlands	57	28.50
Korea	53	5.89
Romania	45	15.00
Spain	41	10.25
Iran	38	12.67
Portugal	25	8.33
Denmark	23	23.00
Italy	23	11.50
India	22	7.33
Singapore	18	18.00

Consumers' behaviour and intention

The investigation indicated that purchase intentions and eventual adoption of electric vehicles are significantly influenced by customer perceptions and confidence about several factors (He et al., 2018). The more the customers' power over factors such as technological views, pricing, availability, or information regarding the usage of electric and hybrid cars, the more probable it is that their behavioural intentions will develop (Wang et al., 2016). These social and psychological aspects specifically employ the theoretical framework of planned behaviour (Ajzen, 1991), which is further elaborated within the theory of reasoned action and expectancy-value (Yzer, 2017). According to Yan et al. (2019), the theories facilitate the identification of factors of customer behaviour. The initial element identified in the literature is the dependence on new electric cars as opposed to conventional diesel or gasoline automobiles (He et al., 2018). According to the Theory of Planned Behaviour (TPB), a larger desire to purchase correlates with a greater likelihood of taking action. Mandys (2021) posits that behavioural attitudes may be categorised as either favourably or adversely influencing the purchasing of electric vehicles (EVs).

The investigation identifies favourable characteristics include environmental respect, operational cost efficiency, and government measures that reduce purchasing costs (Degirmenci & Breitner, 2017; Globisch et al., 2019; Mandys, 2021).
Conversely, other elements, including battery recycling, utilisation of renewable energy, and decreased mileage, are considered (Li et al., 2015; Neaimeh et al., 2017; Shetty et al., 2020). Consequently, the theme analysis reveals the presence of behavioural elements influencing the ultimate selection of automobiles.

Furthermore, it may be said that customer preferences about electric vehicles may be influenced by socio-demographic factors. For instance, a lesser proportion of workers aged over 40 choose for electric vehicles compared to their younger counterparts (Ning et al., 2020). For example, male buyers are more inclined to get an electric vehicle, particularly those with advanced educational credentials, such as a bachelor's or PhD degree. There exist divergent perspectives about the influence of wealth on electric vehicle selection (Yang & Tan, 2019). The latter aspect pertains to the perceived behavioural control associated with electric vehicles. According to Yan et al. (2019) and Kumar and Alok (2020), enough economic capacity influences the perceived control over individual consumer behaviour and the possibility for locating charging infrastructure or establishing it directly at home.

Finally, it is observed from the literature that a variability in subjective norms significantly affects the geography of EV development (Yzer, 2017). Li et al. (2020) outline theoretical elements with their results, such as the presence of states' conditions to favour EVs over conventional vehicles, which directly affect consumers, creating barriers to other cars.

Purchase and value

Three elements that impact electric vehicle purchase intention are price consciousness (Cui et al., 2021), environmental concern (Adnan et al., 2018), and customer perception and personality (He et al., 2018). Consumer perceptions of electric vehicle features might incentivize automakers to enhance vehicle design and marketing strategies (Rezvani et al., 2015). Zarazua de Rubens (2019) asserts that transport regulation must be amended to facilitate the competitive operation of electric vehicles (EVs). Wang et al. (2016) emphasise the importance of environmental concerns in the acquisition of electric and hybrid cars; nevertheless, economic issues may be more significant for prospective EV consumers (Mukherjee & Ryan, 2020). The TAM was ultimately established in this context (Biancone et al., 2021). A research by Dudenhoffer (2013) indicates that the challenges involved with acquiring electric vehicles are mostly psychological and linked to technology non-acceptance.

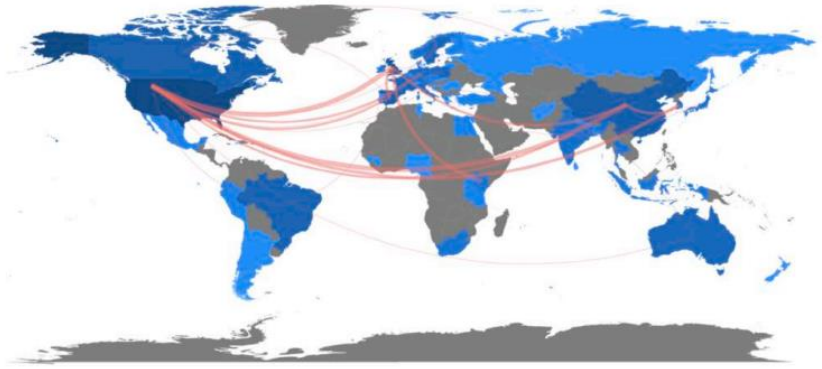

Fig. 9. Country collaboration map. Source: Author's elaboration using Bibliometrix.

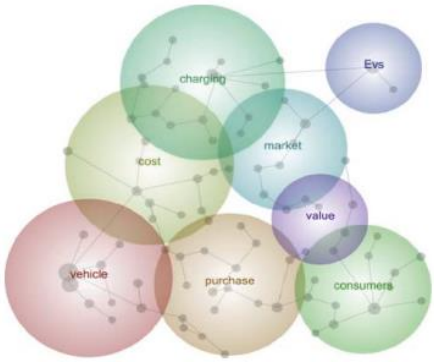

Fig. 10. Key themes and their relationship results of the analysis. Source: Author's elaboration using Leximancer.

Market and policy

Two categories of governmental regulations can facilitate sustainable consumption and production based on these consumer motivators. The first involves the implementation of green production regulations, including the establishment of fuel-efficiency and pollutant emission standards, as well as the imposition of a tax on external costs to modify consumer behaviour. The second pertains to incentives, which encompass offering consumers a tax subsidy or exemption to promote environmentally friendly practices (Huang et al., 2018). Consumers may engage in this policy framework, including climate objectives, air quality targets, and the informational landscape (TyreeHageman et al., 2014). In San Diego, social media has fostered a community of shoppers capable of receiving continuous information at any location and time. A feeling of community might mitigate customers' hesitance to purchase, which stems from insufficient charging infrastructure, power generating solutions, electricity distribution, and storage (Bratucu et al., 2019).

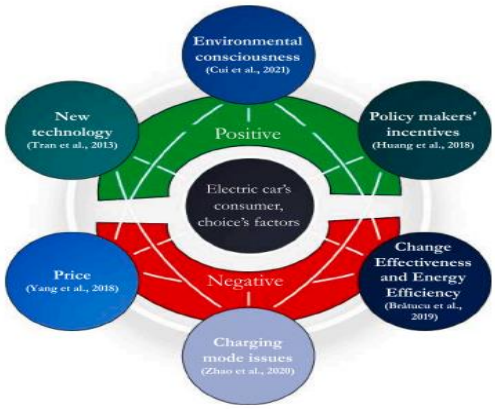

Fig. 11. Positive and negative elements affecting consumer and customer behaviour

Vehicle's characteristics

Another conclusion indicates that technology advancement is crucial for the development of electric vehicles and the comprehension of customer behaviour. It is associated with the environmental concern and influences a portion of the value. Emerging technologies are seen inherently appealing to electric vehicle purchasers. These customers often have a more favourable disposition towards innovations and demonstrate a greater inclination towards new technology (Tran et al., 2013). This knowledge, along with regulations to enhance the industry's viability, has attracted more customers, hence promoting increased product uptake (Kang et al., 2015). This results in consumer choice determinants influenced by technical aspects and preferences related to socio-demographic variables, use profiles, and social impact (Soltani et al., 2015). The same authors believe that customer choice behaviours are reasonable and predicated on performance and pricing features. Nonetheless, it is essential to acknowledge that the surrounding environment affects consumer decisions via social influence mechanisms, including conformity, identification, and internalisation. This demonstrates that preferences are neither fixed nor predetermined; rather, option scenarios and automobile acquisitions provide as avenues for the formation and alteration of preferences (Axsen & Kurani, 2013b).

The expense of electric vehicles is a perceived factor. Consequently, buyers with fundamental requirements like food and clothes would prioritise cost. Consequently, elevated pricing will not promote electric vehicle adoption, and it is essential for developing the automotive industry's strategy (Cui et al., 2021). Price acceptability of electric vehicles (EVs) has risen among other customers, with quality being a factor in the decision process (Yang et al., 2018).

Certain customers have highlighted that the hybrid electric vehicle epitomises the pinnacle of automotive technology, indicating it constitutes a transformative shift from the conventional internal combustion engine (Heffner et al., 2007). Significant transformations in the automobile sector necessitate technological innovation and a reorientation towards alternative fuel vehicles (He & Chen, 2012). Unlike in the past, comprehending customer preferences for alternative fuel cars is difficult. The process of preference building encompasses factors beyond conventional engineering concerns, including elements of social impact distinct from standard paradigms (Tian & Chen, 2013). Yousif & Alsamydai (2019) indicate that customers choose electric vehicles (EVs) characterised by an increased driving range, reduced charging duration, higher top speed, diminished pollutant emissions, and cheaper cost. The electrification of the transportation industry has the potential to substantially reduce greenhouse gas emissions and reliance on oil (Adnan et al., 2017).

Charging and batteries

Electric cars can achieve a 30% to 50% decrease in carbon dioxide emissions and a 40% to 60% enhancement in fuel economy compared to conventional fuel vehicles (Asadi et al., 2021). This technological transition is anticipated to be bolstered by the utilisation of renewable energy, resulting in decreased smog and pollution levels, along with improvements in public health (Mukherjee & Ryan, 2020). Seebauer et al. (2019) assert that implementing tools like yearly personal carbon budgets would guide customers towards low-carbon products and services, hence establishing the notion of individual emission limitations. Environmental and energy concerns are essential for attaining the EU's 2050 decarbonisation objectives in the power and transportation sectors (Prata et al., 2013). This will be accomplished by renewable resources (Mukherjee & Ryan, 2020). The advent of electric vehicles may signify an escalating, unregulated demand from consumers, therefore leading to higher energy costs (Kubli et al., 2018). Despite being seen as energy-efficient, electric vehicles might generate methane and other pollutants as a result of the battery (Bratucu et al., 2019).

Numerous issues associated with batteries arose from the theme analysis. The absence of charging infrastructure may serve as a practical impediment for customers residing in apartment complexes or condos lacking home charging stations (Matthews et al., 2017). Zhao et al. (2020) assert that the involvement of private facilities in the charging market would facilitate electric vehicle operators in selecting a distant charging station nearest to their journey destination. The charging service can be facilitated by parking spot trades, eliminating the need for queuing or travelling to public charging stations, provided that customers and private stack owners reside within the same community. Moreover, the literature examines scenarios in which the charging platform is either private or public. Nonetheless, expanding public charging stations to accommodate increasing demand is deemed

unrealistic. The deficiency of land resources in big and medium-sized cities renders parking space a limited commodity (Zhao et al., 2020). A topic of trust arises with blockchain technology, enabling the proposal of vehicle-to-vehicle electricity trading systems that mitigate energy concern.

Discussion

Encouragements from policymakers (European Parliament, 2019; US EPA, 2021) have effectively provoked discourse on reducing the carbonisation of the transportation sector. Consequently, this has markedly increased the attention of researchers and practitioners in electric vehicles (EVs). The 254 gathered articles span from 1983 to 2021, exhibiting significant rise in publishing beginning in 2017. This increase might be regarded as a result of the EU's ambition to establish itself as a global leader in decarbonisation (European Commission, 2017).

The co-citation analysis indicates that the pertinent publications for the subject are Energy Policy Journal, Transportation Research Part A, Transportation Research Part D, and Journal of Cleaner Production and Sustainability. The last two journals showcase pertinent works about sustainable decisions informed by the Theory of Planned Behaviour and variables influencing electric vehicle purchases (Adnan et al., 2017; Asadi et al., 2021; Carlucci et al., 2018), aligning with the findings of this study. Furthermore, the authors' co-citation analysis identifies four research strands: the influence of consumers on electric vehicle purchases (Axsen & Kurani, 2013a; Axsen & Sovacool, 2019), investigations into vehicle performance and sustainable consumption (Skippon, 2014), factors driving sustainability (Jansson et al., 2017), and customer satisfaction regarding the maximum mileage of electric vehicles (Franke et al., 2017).

The study reveals four research clusters concerning environmental sustainability, the necessity for appropriate transportation infrastructure to promote electric vehicles, the function of batteries, and buying models in conjunction with battery utilisation. These findings contribute more evidence to the existing literature. Particularly in light of Cordera et al. (2019), the study substantiates the influence of incentives on reducing the purchase price of electric vehicles while also elucidating the connection between supplementary purchasing variables and sustainability concerns, as well as the accessibility of charging infrastructure.

Geographic research reveals that the United States (137) leads in publications on the issue, followed by China (100), the United Kingdom (35), and Canada (31). It also discloses the numerous locations that remain uninvolved in the discourse. With the exception of Saudi Arabia (4), no oil-producing nation has sought to engage with the issue in the Middle East. The collaboration map indicates that the strongest partnerships exist between China and the United States, as well as between the United States and Europe.

The thematic analysis of the articles enabled the identification of numerous critical topics, including 'Consumer', 'Purchase', 'Market', 'Vehicle', and 'Electric Vehicle'. Three characteristics that might influence electric vehicle purchase intention include pricing awareness (Cui et al., 2021), environmental concern (Adnan et al., 2018), and customer perception and personality (He et al., 2018). Two governmental policy streams were identified to foster sustainable use and production. The first pertains to regulations on sustainable manufacturing, whilst the second involves incentives, including offering customers subsidies or tax exemptions to promote environmentally friendly usage (Huang et al., 2018). Additionally, the study reveals that technical advancement is crucial to the electric car's growth, since it influences a portion of its worth (Kang et al., 2015). The study indicates that acquiring an electric car is simultaneously sensible and illogical (Ajzen, 1991). Consequently, the necessity of characterising the electric automobile as a positional good, which reflects the buyer's readiness to embrace environmental consciousness and technological development, is emphasised (Hale et al., 2002). The demographic factor was ultimately taken into account. Male customers with advanced educational qualities exhibit a greater propensity to get an electric vehicle (Ning et al., 2020). Consequently, the findings augment those of Higueras-Castillo et al. (2021) by include additional customer acquisition characteristics beyond range, incentives, and reliability.

Theoretical implications

The investigation yielded some theoretical implications. This research builds upon Liao et al.'s (2017) analysis by enhancing the literature with bibliometric, co-citation, thematic, and geographic analyses. The latter addresses the needs outlined by Degirmenci and Breitner (2017), so highlighting the principal study fields on the issue and the focal points of scholarly interest. Furthermore, the study methodology facilitated a systematic comprehension of

consumer and customer behaviour within the electric vehicle context, providing a comprehensive overview of the disparate and inconsistent literature while examining Ajzen's (1991) Theory of Planned Behaviour in relation to electric vehicles. This signifies a unique impetus for research, offering a theoretical foundation for consumer analysis in the increasingly contentious academic discourse around the electric vehicle industry. It employs a theme analysis technique utilising Leximancer 4.0 software, which is generalizable and suitable to many situations. Nonetheless, the primary significant contribution is to the TAM. Moreover, the electric vehicle buyer was recognised as being attuned to ecological concerns and accessible energy affordability. Tran et al. (2013) assert that attraction to technology is a primary element influencing customers' inclination towards a product, but He et al. (2018) contend that the decision to purchase an electric car is more contingent upon the consumer's perception of the vehicle than its technological features. Nonetheless, the evidence indicates that sustainability and environmental awareness are essential factors in the selection of an electric vehicle (He et al., 2018). An extracting variable pertains to enabling circumstances. It is evident that the incentives of policymakers are significant positive motivators for purchases (Huang et al., 2018; Nie et al., 2016). Furthermore, the results indicate that blockchain may enhance confidence in vehicle-to-vehicle electrical trading systems and energy traceability (Xia et al., 2020).

Limitations

This research possesses several limitations. Initially, to prevent data duplication, the authors restricted the article sample to the Scopus database only. Despite the search query string being comprehensive, it is not feasible to exclude several articles pertinent to the investigation. The study does not exclude the potential for knowledge loss from nations that do not utilise the Scopus database for similar reasons. Secondly, while it reduces the sample's subjectivity, the employed approach may neglect important discoveries and insights from the chosen study. The research relies on a temporal snapshot, employing a visual methodology, which may evolve as electric vehicles gain prevalence. Furthermore, the multidisciplinary character of the subject may constrain future methodological avenues of enquiry due to the diverse research methodologies involved. This research ultimately neglects practitioner feedback that might enhance the efficacy of EV consumer behaviour changes.

Directions for future research

This study conducts a bibliometric and thematic analysis based on the foundations established by Massaro et al. (2016) and Paul & Criado (2020). The research offered a comprehensive summary of consumer and customer behaviour studies within the electric vehicle sector to organise and integrate current knowledge. The comprehensive literature research facilitated a customer identification that elucidates the primary factors influencing decisions and uncertainties around non-adoption. Employing the methodology of Chen et al. (2021) and grounded in this comprehensive review and analysis of the current literature, the authors provide a research agenda to promote further advancement in the subject. This section differentiates among theory, context, consumer characteristics, and methodology (TCCM) based on the study findings and their consequences (Chakma et al., 2021).

Conclusion

This literature review analyses customer behaviour in the electric vehicle industry via bibliometric and theme analysis methodologies. It provides direction for prospective researchers concerning consumer traits, theories, contexts, and procedures. Our investigation identified key co-citation networks across journals and authors, prominent research institutions globally, and five critical themes and theoretical foundations regarding electric vehicle purchasing decisions. In light of the backdrop and the urgent necessity to enhance future mobility due to climate change, the promotion, development, and dissemination of knowledge in this domain is imperative. We anticipate that our contribution will reinvigorate the discourse on this subject and guide subsequent research in this complex setting. Data visualisation methods shown significant efficacy in conveying intricate bibliometric information via graphical and network-based representations. Visualisation tools enabled the identification of prominent authors, research clusters, citation networks, and topic development, hence improving the interpretability of research findings and aiding evidence-based decision-making. The study suggests that customer acceptability of electric cars is affected by a confluence of economic, environmental, technological, and social issues. Government incentives, availability of charging infrastructure, battery performance, environmental

consciousness, and cost factors are critical determinants of adoption behaviour. As the worldwide shift towards sustainable transportation intensifies, future research must concentrate on emerging economies, behavioural interventions, customer trust, smart mobility integration, and long-term sustainability results. This study's findings offer significant insights for academics, policymakers, manufacturers, and stakeholders aiming to enhance electric car adoption and foster a cleaner, more sustainable transportation environment.

References

[1.] Adnan, N., Md Nordin, S., Hadi Amini, M., & Langove, N. (2018). What make consumer sign up to PHEVs? Predicting Malaysian consumer behavior in adoption of PHEVs. Transportation Research Part A: Policy and Practice, 113, 259–278. https://doi.org/ 10.1016/j.tra.2018.04.007

[2.] Adnan, N., Nordin, S. M., Rahman, I., & Amini, M. H. (2017). A market modeling review study on predicting Malaysian consumer behavior towards widespread adoption of PHEV/EV. Environmental Science and Pollution Research, 24(22), 17955–17975. https://doi.org/10.1007/s11356-017-9153-8

[3.] AJG. (2021). Academic Journal Guide (AJG)—The Association of Business Schools-. https:// charteredabs.org/academic-journal-guide-2021/.

[4.] Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

[5.] Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

[6.] Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

[7.] Akin, B., Choi, S., & Toliyat, H. A. (2012). DSP applications in electric and hybrid electric vehicles. IEEE Signal Processing Magazine, 29(3), 136+130-133. https://doi.org/ 10.1109/MSP.2012.2185863.

[8.] Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. Journal of Informetrics, 11(4), 959–975. Scopus. https://doi.org/ 10.1016/j.joi.2017.08

[9.] Arora, S. D., & Chakraborty, A. (2021). Intellectual structure of consumer complaining behavior (CCB) research: A bibliometric analysis. Journal of Business Research, 122, 60–74. https://doi.org/10.1016/j.jbusres.2020.08.043

[10.] Arun, T. M., Kaur, P., Ferraris, A., & Dhir, A. (2021). What motivates the adoption of green restaurant products and services? A systematic review and future research agenda. Business Strategy and the Environment, 30(4), 2224–2240. https://doi.org/ 10.1002/bse.27

[11.] Asadi, S., Nilashi, M., Samad, S., Abdullah, R., Mahmoud, M., Alkinani, M. H., & Yadegaridehkordi, E. (2021). Factors impacting consumers' intention toward adoption of electric vehicles in Malaysia. Journal of Cleaner Production, 282. https:// doi.org/10.1016/j.jclepro.2020.124474

[12.] Axsen, J., & Kurani, K. S. (2013b). Hybrid, plug-in hybrid, or electric-What do car buyers want? Energy Policy, 61, 532–543. https://doi.org/10.1016/j.enpol.2013.05.122

[13.] Axsen, J., & Kurani, K. S. (2013b). Hybrid, plug-in hybrid, or electric-What do car buyers want? Energy Policy, 61, 532–543. https://doi.org/10.1016/j.enpol.2013.05.122

[14.] Axsen, J., & Sovacool, B. K. (2019). The roles of users in electric, shared and automated mobility transitions. Transportation Research Part D: Transport and Environment, 71, 1–21. https://doi.org/10.1016/j.trd.2019.02.012

[15.] Benzidia, S., Luca, R. M., & Boiko, S. (2021). Disruptive innovation, business models, and encroachment strategies: Buyer's perspective on electric and hybrid vehicle technology. Technological Forecasting and Social Change, 165. https://doi.org/ 10.1016/j.techfore.2020.12052

[16.] Biancone, P., Secinaro, S., Marseglia, R., & Calandra, D. (2021). E-health for the future. Managerial perspectives using a multiple case study approach. Technovation, 102406. https://doi.org/10.1016/j.technovation.2021.102406

[17.] Biesenthal, C., & Wilden, R. (2014). Multi-level project governance: Trends and opportunities. International Journal of Project Management, 32(8), 1291–1308.

[18.] Bramer, W. M., Rethlefsen, M. L., Kleijnen, J., & Franco, O. H. (2017). Optimal database combinations for literature searches in systematic reviews: A prospective exploratory study. Systematic Reviews, 6(1), 245. https://doi.org/10.1186/s13643-017-0644-y

[19.] Bratucu, ˘ G., Trifan, A., Dovleac, L., Chit¸u, I. B., Todor, R. D., & Bratucu, ˘ R. (2019). Acquisition of electric vehicles-A step towards green consumption. Empirical research among Romanian students. Sustainability (Switzerland), 11(23). https://doi.org/ 10.3390/su11236639
[20.] Bratucu, ˘ G., Trifan, A., Dovleac, L., Chit¸u, I. B., Todor, R. D., & Bratucu, ˘ R. (2019). Acquisition of electric vehicles-A step towards green consumption. Empirical research among Romanian students. Sustainability (Switzerland), 11(23). https://doi.org/ 10.3390/su11236639
[21.] Campbell, C., Pitt, L. F., Parent, M., & Berthon, P. R. (2011). Understanding consumer conversations around ads in a Web 2.0 world. Journal of Advertising, 40(1), 87–102.
[22.] Canals Casals, L., Martinez-Laserna, E., García, B., & Nieto, N. (2016). Sustainability analysis of the electric vehicle use in Europe for CO2 emissions reduction. Journal of Cleaner Production, 127. https://doi.org/10.1016/j.jclepro.2016.03.120
[23.] Carlucci, F., Cir` a, A., & Lanza, G. (2018). Hybrid electric vehicles: Some theoretical considerations on consumption behaviour. Sustainability (Switzerland), 10(4). https://doi.org/10.3390/su10041302
[24.] Centobelli, P., Cerchione, R., & Ertz, M. (2020). Agile supply chain management: Where did it come from and where will it go in the era of digital transformation? Industrial Marketing Management, 90, 324–345. https://doi.org/10.1016/j. indmarman.2020.07.011
[25.] Chakma, R., Paul, J., & Dhir, S. (2021). Organizational Ambidexterity: A Review and Research Agenda. IEEE Transactions on Engineering Management. https://doi.org/ 10.1109/TEM.2021.3114609
[26.] Chen, Y., Mandler, T., & Meyer-Waarden, L. (2021). Three decades of research on loyalty programs: A literature review and future research agenda. Journal of Business Research, 124, 179–197. https://doi.org/10.1016/j.jbusres.2020.11.057
[27.] Cobo, M. J., Lopez-Herrera, ´ A. G., Herrera-Viedma, E., & Herrera, F. (2011). Science mapping software tools: Review, analysis, and cooperative study among tools. Journal of the American Society for information Science and Technology, 62(7), 1382–1402.
[28.] Cordera, R., dell'Olio, L., Ibeas, A., de Ortúzar, J., & D.. (2019). Demand for environmentally friendly vehicles: A review and new evidence. International Journal of Sustainable Transportation, 13(3), 210–223. https://doi.org/10.1080/ 15568318.2018.1459969
[29.] Cui, L., Wang, Y., Chen, W., Wen, W., & Han, M. S. (2021). Predicting determinants of consumers' purchase motivation for electric vehicles: An application of Maslow's hierarchy of needs model. Energy Policy, 151. https://doi.org/10.1016/j. enpol.2021.112167
[30.] Dabi´c, M., Vla˘ci´c, B., Paul, J., Dana, L.-P., Sahasranamam, S., & Glinka, B. (2020). Immigrant entrepreneurship: A review and research agenda. Journal of Business Research, 113, 25–38. https://doi.org/10.1016/j.jbusres.2020.03.013
[31.] de Bem Machado, A., Secinaro, S., Calandra, D., & Lanzalonga, F. (2021). Knowledge management and digital transformation for Industry 4.0: A structured literature review. Knowledge Management Research & Practice, 1–19. https://doi.org/10.1080/ 147
[32.] Degirmenci, K., & Breitner, M. H. (2017). Consumer purchase intentions for electric vehicles: Is green more important than price and range? Transportation Research Part D: Transport and Environment, 51, 250–260. https://doi.org/10.1016/j. trd.2017.01.001
[33.] Degirmenci, K., & Breitner, M. H. (2017). Consumer purchase intentions for electric vehicles: Is green more important than price and range? Transportation Research Part D: Transport and Environment, 51, 250–260. https://doi.org/10.1016/j. trd.2017.01.001
[34.] Dolcharumanee, N. (2018). *Factors affecting the decision for purchasing electric vehicles* (Master's thesis). Bangkok University, Bangkok, Thailand.
[35.] Donthu, N., Reinartz, W., Kumar, S., & Pattnaik, D. (2020). A Retrospective Review of the First 35 Years of the International Journal of Research in Marketing. International Journal of Research in Marketing.
[36.] Dudenhoffer, ¨ K. (2013). Why electric vehicles failed. Journal of Management Control, 24 (2), 95–124. https://doi.org/10.1007/s00187-013-0174-2
[37.] Dumay, J. (2014). 15 years of the Journal of Intellectual Capital and counting. Journal of Intellectual Capital. https://doi.org/10.1108/JIC-09-2013-0098
[38.] ecinaro, S., Brescia, V., Calandra, D., & Biancone, P. (2020). Employing bibliometric analysis to identify suitable business models for electric cars. Journal of Cleaner Production, 121503.

[39.] Egbue, O., & Long, S. (2012). Barriers to widespread adoption of electric vehicles: An analysis of consumer attitudes and perceptions. Energy Policy, 48, 717–729. https:// doi.org/10.1016/j.enpol.2012.06.009
[40.] Elo, S., & Kyng¨ as, H. (2008). The qualitative content analysis process. Journal of advanced nursing, 62(1), 107–115.
[41.] European Commission. (2017). A European Union that protects the planet, empowers its consumers and defends its industry and workers. https://ec.europa.eu/transparency/ regdoc/rep/1/2017/EN/COM-2017-675-F1-EN-MAIN-PART-1.PDF.
[42.] European Parliament. (2019). CO2 emissions from cars: Facts and figures. https://www. europarl.europa.eu/news/en/headlines/society/20190313STO31218/co2- emissions-from-cars-facts-and-figures-infographics
[43.] Forliano, C., De Bernardi, P., & Yahiaoui, D. (2021). Entrepreneurial universities: A bibliometric analysis within the business and management domains. Technological Forecasting and Social Change, 165, Article 120522. https://doi.org/10.1016/j. techfore.2020.1205
[44.] Franke, T., Günther, M., Trantow, M., & Krems, J. F. (2017). Does this range suit me? Range satisfaction of battery electric vehicle users. Applied Ergonomics, 65, 191–199. https://doi.org/10.1016/j.apergo.2017.06.013
[45.] Franke, T., Günther, M., Trantow, M., & Krems, J. F. (2017). Does this range suit me? Range satisfaction of battery electric vehicle users. Applied Ergonomics, 65, 191–199. https://doi.org/10.1016/j.apergo.2017.06.013
[46.] Globisch, J., Plotz, ¨ P., Dütschke, E., & Wietschel, M. (2019). Consumer preferences for public charging infrastructure for electric vehicles. Transport Policy, 81, 54–63. https://doi.org/10.1016/j.tranpol.2019.05.017
[47.] Goebel, C. (2013). On the business value of ICT-controlled plug-in electric vehicle charging in California. Energy Policy, 53, 1–10. https://doi.org/10.1016/j. enpol.201
[48.] Hale, J. L., Householder, B. J., & Greene, K. L. (2002). The theory of reasoned action. The persuasion handbook: Developments in theory and practice, 14(2002), 259–286.
[49.] Harr´e, M. S., & Bossomaier, T. (2014). Strategic islands in economic games: Isolating economies from better outcomes. Entropy, 16(9), 5102–5121. https://doi.org/ 10.3390/e16
[50.] He, X., Zhan, W., & Hu, Y. (2018). Consumer purchase intention of electric vehicles in China: The roles of perception and personality. Journal of Cleaner Production, 204, 1060–1069. https://doi.org/10.1016/j.jclepro.2018.08.260
[51.] Heffner, R. R., Kurani, K. S., & Turrentine, T. S. (2007). Symbolism and the adoption of fuel-cell vehicles. World Electric Vehicle Journal, 1(1), 24–31. https://doi.org/ 10.3390/wevj1010024
[52.] Higueras-Castillo, E., Guill´en, A., Herrera, L.-J., & Li´ebana-Cabanillas, F. (2021). Adoption of electric vehicles: Which factors are really important? International Journal of Sustainable Transportation, 15(10), 799–813. https://doi.org/10.1080/ 15568318.2020.1818330
[53.] Huang, S. K., Kuo, L., & Chou, K.-L. (2018). The impacts of government policies on green utilization diffusion and social benefits—A case study of electric motorcycles in Taiwan. Energy Policy, 119, 473–486. https://doi.org/10.1016/j.enpol.2018.04.061
[54.] Huang, S. K., Kuo, L., & Chou, K.-L. (2018). The impacts of government policies on green utilization diffusion and social benefits—A case study of electric motorcycles in Taiwan. Energy Policy, 119, 473–486. https://doi.org/10.1016/j.enpol.2018.04.061
[55.] Huang, S. K., Kuo, L., & Chou, K.-L. (2018). The impacts of government policies on green utilization diffusion and social benefits—A case study of electric motorcycles in Taiwan. Energy Policy, 119, 473–486. https://doi.org/10.1016/j.enpol.2018.04.061
[56.] Hulland, J., & Houston, M. B. (2020). Why systematic review papers and meta-analyses matter: An introduction to the special issue on generalizations in marketing. Journal of the Academy of Marketing Science, 48(3), 351–359. https://doi.org/10.1007/ s11747-02
[57.] Jaiswal, D., Kant, R., Singh, P. K., & Yadav, R. (2021). Investigating the role of electric vehicle knowledge in consumer adoption: Evidence from an emerging market. Benchmarking: An International Journal, ahead-of-print(ahead-of-print). https://doi. org/10.1108/BIJ-11-2020-0579.

[58.] Jansson, J., Nordlund, A., & Westin, K. (2017). Examining drivers of sustainable consumption: The influence of norms and opinion leadership on electric vehicle adoption in Sweden. Journal of Cleaner Production, 154, 176–187. https://doi.org/ 10.1016/j.jclepro.2017.03.186

[59.] Jin, L., & Slowik, P. (2017). *Electric vehicles consumer awareness*. The International Council on Clean Transportation (ICCT).

[60.] Kang, N., Feinberg, F. M., & Papalambros, P. Y. (2015). Integrated decision making in electric vehicle and charging station location network design. Journal of Mechanical Design, Transactions of the ASME, 137(6). https://doi.org/10.1115/1.4029894

[61.] Kang, N., Feinberg, F. M., & Papalambros, P. Y. (2015). Integrated decision making in electric vehicle and charging station location network design. Journal of Mechanical Design, Transactions of the ASME, 137(6). https://doi.org/10.1115/1.4029894

[62.] Krippendorff, K. (2018). Content analysis: An introduction to its methodology. Sage publications.

[63.] Kubli, M., Loock, M., & Wüstenhagen, R. (2018). The flexible prosumer: Measuring the willingness to co-create distributed flexibility. Energy Policy, 114, 540–548. https:// doi.org/10

[64.] Küfeoglu, ˇ S., Melchiorre, D. A., & Kotilainen, K. (2019). Understanding tariff designs and consumer behaviour to employ electric vehicles for secondary purposes in the United Kingdom. Electricity Journal, 32(6), 1–6. https://doi.org/10.1016/j.tej.2019.05.011

[65.] Kumar, R. R., & Alok, K. (2020). Adoption of electric vehicle: A literature review and prospects for sustainability. Journal of Cleaner Production, 253, Article 119911. https://doi.org/10.1016/j.jclepro.2019.119911

[66.] Li, C., Cao, Y., Zhang, M., Wang, J., Liu, J., Shi, H., & Geng, Y. (2015). Hidden Benefits of Electric Vehicles for Addressing Climate Change. Scientific Reports, 5(1), 9213. https://doi.org/10.1038/srep09213

[67.] Li, X., et al. (2023). The impact of subsidy reductions on electric vehicle adoption in metropolitan and smaller urban areas. Journal of the American Society for information Science, 24(4), 265–269.

[68.] Liao, F., Molin, E., & van Wee, B. (2017). Consumer preferences for electric vehicles: A literature review. Transport Reviews, 37(3), 252–275. https://doi.org/10.1080/ 01441647.2016.1230794

[69.] Liao, F., Molin, E., & van Wee, B. (2017). Consumer preferences for electric vehicles: A literature review. Transport Reviews, 37(3), 252–275. https://doi.org/10.1080/ 01441647.2016.1230794

[70.] Liu, J., & Santos, G. (2015). Decarbonizing the Road Transport Sector: Break-even Point and Consequent Potential Consumers' Behavior for the U.S. Case. International Journal of Sustainable Transportation, 9(3), 159–175. https://doi.org/10.1080/ 15568318.2012.749962

[71.] Lopes, M. M., Moura, F., & Martinez, L. M. (2014). A rule-based approach for determining the plausible universe of electric vehicle buyers in the Lisbon Metropolitan Area. Transportation Research Part A: Policy and Practice, 59, 22–36. https://doi.org/10.1016/j.tra.2013.09.009

[72.] Mandys, F. (2021). Electric vehicles and consumer choices. Renewable and Sustainable Energy Reviews, 142, Article 110874. https://doi.org/10.1016/j.rser.2021.110874

[73.] Margret, M., & Sydney, S. (2021). Consumer behaviour and electric vehicle purchasing patterns: A study of plug-in electric vehicle adoption. Entrepreneurship Theory and Practice, 45(6), 1550–1590.

[74.] Mariani, M., & Borghi, M. (2019). Industry 4.0: A bibliometric review of its managerial intellectual structure and potential evolution in the service industries. Technological Forecasting and Social Change, 149, Article 119752. https://doi.org/10.1016/j. techfore.2

[75.] Massaro, M., Dumay, J., & Guthrie, J. (2016). On the shoulders of giants: Undertaking a structured literature review in accounting. Accounting, Auditing & Accountability Journal, 29(5), 767–801. https://doi.org/10.1108/AAAJ-01-2015-1939

[76.] Massaro, M., Secinaro, S., Dal Mas, F., Brescia, V., & Calandra, D. (2021). Industry 4.0 and circular economy: An exploratory analysis of academic and practitioners' perspectives. Business Strategy and the Environment, 30(2), 1213–1231.

[77.] Matthews, L., Lynes, J., Riemer, M., Del Matto, T., & Cloet, N. (2017). Do we have a car for you? Encouraging the uptake of electric vehicles at point of sale. Energy Policy, 100, 79–88. https://doi.org/10.1016/j.enpol.2016.10.001
[78.] Matthews, L., Lynes, J., Riemer, M., Del Matto, T., & Cloet, N. (2017). Do we have a car for you? Encouraging the uptake of electric vehicles at point of sale. Energy Policy, 100, 79–88. https://doi.org/10.1016/j.enpol.2016.10.001
[79.] Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: A comparative analysis. Scientometrics, 106(1), 213–228.
[80.] Morton, C. (2011). Electric vehicles: Will consumers become enthusiastic? In *Conference Proceedings* (pp. xx–xx). Publisher.
[81.] Mukherjee, S. C., & Ryan, L. (2020). Factors influencing early battery electric vehicle adoption in Ireland. Renewable and Sustainable Energy Reviews, 118. https://doi.org/ 10.1016/j.rser.2019.109504
[82.] Neaimeh, M., Salisbury, S. D., Hill, G. A., Blythe, P. T., Scoffield, D. R., & Francfort, J. E. (2017). Analysing the usage and evidencing the importance of fast chargers for the adoption of battery electric vehicles. Energy Policy, 108, 474–486. https://doi.org/ 10.1016/j.enpo
[83.] Nie, Y. (Marco), Ghamami, M., Zockaie, A., & Xiao, F. (2016). Optimization of incentive polices for plug-in electric vehicles. Transportation Research Part B: Methodological, 84, 103–123. https://doi.org/10.1016/j.trb.2015.12.011.
[84.] Ning, W., Guo, J., Liu, X., & Pan, H. (2020). Incorporating individual preference and network influence on choice behavior of electric vehicle sharing using agent-based model. International Journal of Sustainable Transportation, 14(12), 917–931. https:// doi.org/10.1080/15568318.2019.1656310
[85.] Ning, W., Guo, J., Liu, X., & Pan, H. (2020). Incorporating individual preference and network influence on choice behavior of electric vehicle sharing using agent-based model. International Journal of Sustainable Transportation, 14(12), 917–931. https:// doi.org/10.10
[86.] Okoli, C. (2015). A guide to conducting a standalone systematic literature review. Communications of the Association for Information Systems, 37(1), 879–910.
[87.] Ouyang, X., et al. (2024). Effects of policy interventions on electric vehicle adoption: Evidence from zero-emission vehicle mandates and incentives. *Journal of Emerging Technologies and Innovative Research (JETIR), , 3*(5), 45-78.
[88.] Pandey, M., Mohan, M., & Subha, S. (2021). Customer perception towards purchase intention of electric vehicles. *Journal of Emerging Technologies and Innovative Research (JETIR), 8*(I number), Page numbers.
[89.] Paul, J., & Criado, A. R. (2020). The art of writing literature review: What do we know and what do we need to know? International Business Review, 29(4), Article 101717.
[90.] Paul, J., & Feliciano-Cestero, M. M. (2021). Five decades of research on foreign direct investment by MNEs: An overview and research agenda. Journal of business research, 124, 800–812. https://doi.org/10.1016/j.jbusres.2020.04.017
[91.] Paul, J., & Mas, E. (2020). Toward a 7-P framework for international marketing. Journal of Strategic Marketing, 28(8), 681–701. https://doi.org/10.1080/ 0965254X.2019
[92.] Paul, J., & Mas, E. (2020). Toward a 7-P framework for international marketing. Journal of Strategic Marketing, 28(8), 681–701. https://doi.org/10.1080/ 0965254X.2019.1569111
[93.] Paul, J., Lim, W. M., O'Cass, A., Hao, A. W., & Bresciani, S. (2021). Scientific procedures and rationales for systematic literature reviews (SPAR-4-SLR). International Journal of Consumer Studies, 45(4), O1–O16. https://doi.org/10.1111/ijcs.12695
[94.] Pedrosa, G., & Nobre, H. (2019). The influence of consumer mobility concerns on electric vehicle adoption. *World Review of Intermodal Transportation Research, 8*(3), 45-89.
[95.] Plotz, ¨ P., Schneider, U., Globisch, J., & Dütschke, E. (2014). Who will buy electric vehicles? Identifying early adopters in Germany. Transportation Research Part A: Policy and Practice, 67, 96–109. https://doi.org/10.1016/j.tra.2014.06.006
[96.] Prata, J., Arsenio, E., & Pontes, J. P. (2013). Moving towards the sustainable city: The role of electric vehicles, renewable energy and energy efficiency. WIT Transactions on Ecology and the Environment, 179 VOLUME 2, 871–883. https://doi.org/10.2495/ SC130

[97.] Radu-Lefebvre, M., Lefebvre, V., Crosina, E., & Hytti, U. (2021). Entrepreneurial identity: A review and research agenda. Entrepreneurship Theory and Practice, 45(6), 1550–1590. https://doi.org/10.1177/10422587211013795
[98.] 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. https://doi.org/10.1016/j.trd.2014.10.010
[99.] 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. https://doi.org/10.1016/j.trd.2014.10.010
[100.] Robinson, J., Brase, G., Griswold, W., Jackson, C., & Erickson, L. (2014). Business models for solar powered charging stations to develop infrastructure for electric vehicles. Sustainability (Switzerland), 6(10), 7358–7387. https://doi.org/10.3390/su6107358
[101.] Rooney, D. (2005). Knowledge, economy, technology and society: The politics of discourse. Telematics and informatics, 22(4), 405–422.
[102.] Ruggieri, R., Savastano, M., Scalingi, A., Bala, D., & D'Ascenzo, F. (2018). The impact of Digital Platforms on Business Models: An empirical investigation on innovative startups. Management and Marketing, 13(4), 1210–1225. https://doi.org/10.2478/ mmcks-2018-0032
[103.] Schwartz, H. J. (1983). A Summary of EHV Propulsion Technology. IEEE Transactions on Vehicular Technology, 32(1), 3–6. https://doi.org/10.1109/T-VT.1983.23937
[104.] Seebauer, S., Kulmer, V., & Fruhmann, C. (2019). Promoting adoption while avoiding rebound: Integrating disciplinary perspectives on market diffusion and carbon impacts of electric cars and building renovations in Austria. Energy, Sustainability and Society, 9(1). https://doi.org/10.1186/s13705-019-0212-5
[105.] Shakeel, S., et al. (2022). Social influence and environmental awareness in electric vehicle adoption: An empirical analysis. International Journal of Sustainable Transportation, 9(3),, *3*(4), 55-67.
[106.] Shetty, D. K., Shetty, S., Rodrigues, L. R., Naik, N., Maddodi, C. B., Malarout, N., & Sooriyaperakasam, N. (2020). Barriers to widespread adoption of plug-in electric vehicles in emerging Asian markets: An analysis of consumer behavioral attitudes and perceptions. Cogent Engineering, 7(1), 1796198. https://doi.org/10.1080/ 23311916.2020.1796198
[107.] Silvana, S., et al. (2021). Consumer behaviour in the electric vehicle market: A bibliometric and thematic analysis. Journal of the American Society for information Science, 24(4), 265–278.
[108.] Skippon, S. M. (2014). How consumer drivers construe vehicle performance: Implications for electric vehicles. Transportation Research Part F: Traffic Psychology and Behaviour, 23, 15–31. https://doi.org/10.1016/j.trf.2013.12.008
[109.] Small, H. (1973). Co-citation in the scientific literature: A new measure of the relationship between two documents. Journal of the American Society for information Science, 24(4), 265–269. https://doi.org/10.1002/asi.4630240406
[110.] Soltani, N. Y., Kim, S.-J., & Giannakis, G. B. (2015). Real-Time Load Elasticity Tracking and Pricing for Electric Vehicle Charging. IEEE Transactions on Smart Grid, 6(3), 1303–1313. https://doi.org/10.1109/TSG.2014.2363837
[111.] Souvik, S., et al. (2022). Consumer perceptions and future prospects of electric vehicles in India. Entrepreneurship Theory and Practice, 45(6), 1550–1590.
[112.] Sowa, J. F. (2000). Ontology, metadata, and semiotics. International conference on conceptual structure 88-89
[113.] Stubbs, M. (1996). Text and corpus analysis: Computer-assisted studies of language and culture. Blackwell Oxford.
[114.] Thiel, C., Tsakalidis, A., & J¨ ager-Waldau, A. (2020). Will electric vehicles be killed (again) or are they the next mobility killer app? Energies, 13(7). https://doi.org/ 10.3390/en13
[115.] Tian, P., & Chen, W. (2013). Analyzing social influence through network simulations in choice modeling. Proceedings of the International Conference on Engineering Design, ICED, 9 DS75-09, 165–176. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84897660148&partnerID=40&md5=f52289f490699db493d104c1f089e7d4.

[116.] Tran, M., Banister, D., Bishop, J. D. K., & McCulloch, M. D. (2013). Simulating early adoption of alternative fuel vehicles for sustainability. Technological Forecasting and Social Change, 80(5), 865–875. https://doi.org/10.1016/j.techfore.2012.09.009

[117.] Tran, M., Banister, D., Bishop, J. D. K., & McCulloch, M. D. (2013). Simulating early adoption of alternative fuel vehicles for sustainability. Technological Forecasting and Social Change, 80(5), 865–875. https://doi.org/10.1016/j.techfore.2012.09.009

[118.] Tushar, T. (2021). Consumer attitudes toward e-vehicles: A study of Vadodara city residents. Journal of the American Society for information Science, 24(4), 265–300.

[119.] TyreeHageman, J., Kurani, K. S., & Caperello, N. (2014). What does community and social media use look like among early PEV drivers? Exploring how drivers build an online resource through community relations and social media tools. Transportation Research Part D: Transport and Environment, 33, 125–134. https://doi.org/10.1016/j. trd.2014.09.00

[120.] US EPA. (2021). U.S. Greenhouse Gas Emission and Sinks 1990-2019. https://www.epa. gov/sites/production/files/2021-04/documents/us-ghg-inventory-2021-main-text. pdf

[121.] Van Eck, N., & Waltman, L. (2009). Software survey: VOSviewer, a computer program for bibliometric mapping. Scientometrics, 84(2), 523–538. https://doi.org/10.1007/ s11192-009-0146-3

[122.] Vlaˇci´c, B., Corbo, L., Costa e Silva, S., & Dabi´c, M. (2021). The evolving role of artificial intelligence in marketing: A review and research agenda. Journal of Business Research, 128, 187–203. https://doi.org/10.1016/j.jbusres.2021.01.055.

[123.] Wang, S., Fan, J., Zhao, D., Yang, S., & Fu, Y. (2016). Predicting consumers' intention to adopt hybrid electric vehicles: Using an extended version of the theory of planned behavior model. Transportation, 43(1), 123–143. https://doi.org/10.1007/s11116- 014-95

[124.] Wang, S., Fan, J., Zhao, D., Yang, S., & Fu, Y. (2016). Predicting consumers' intention to adopt hybrid electric vehicles: Using an extended version of the theory of planned behavior model. Transportation, 43(1), 123–143. https://doi.org/10.1007/s11116- 014-9567

[125.] Wang, S., Fan, J., Zhao, D., Yang, S., & Fu, Y. (2016). Predicting consumers' intention to adopt hybrid electric vehicles: Using an extended version of the theory of planned behavior model. Transportation, 43(1), 123–143. https://doi.org/10.1007/s11116- 014-956

[126.] Xia, S., Lin, F., Chen, Z., Tang, C., Ma, Y., & Yu, X. (2020). A Bayesian Game Based Vehicle-to-Vehicle Electricity Trading Scheme for Blockchain-Enabled Internet of Vehicles. IEEE Transactions on Vehicular Technology, 69, 6856–6868. https://doi.org/ 10.1109/TVT.2020.2990443

[127.] Xie, E., Reddy, K. S., & Liang, J. (2017). Country-specific determinants of cross-border mergers and acquisitions: A comprehensive review and future research directions. Journal of World Business, 52(2), 127–183. https://doi.org/10.1016/j. jwb.2016.12.005

[128.] Xu, L., & Su, J. (2016). From government to market and from producer to consumer: Transition of policy mix towards clean mobility in China. Energy Policy, 96, 328–340. https://doi.org/10.1016/j.enpol.2016.05.038

[129.] Yan, Q., Qin, G., Zhang, M., & Xiao, B. (2019). Research on Real Purchasing Behavior Analysis of Electric Cars in Beijing Based on Structural Equation Modeling and Multinomial Logit Model. Sustainability, 11(20), 5870. https://doi.org/10.3390/ su1120

[130.] Yang, F., Xie, Y., Deng, Y., & Yuan, C. (2019). Impacts of battery degradation on statelevel energy consumption and GHG emissions from electric vehicle operation in the United States. Procedia CIRP, 80, 530–535. https://doi.org/10.1016/j. procir.2018.12.010

[131.] Yang, S., Zhang, D., Fu, J., Fan, S., & Ji, Y. (2018). Market cultivation of electric vehicles in China: A survey based on consumer behavior. Sustainability (Switzerland), 10(11). https://doi.org/10.3390/su10114056

[132.] Yang, Y., & Tan, Z. (2019). Investigating the Influence of Consumer Behavior and Governmental Policy on the Diffusion of Electric Vehicles in Beijing, China. Sustainability (Switzerland), 11(24). https://doi.org/10.3390/su11246967

[133.] Yousif, R. O., & Alsamydai, M. J. (2019). Perspective of technological acceptance model toward electric vehicles. International Journal of Mechanical and Production Engineering Research and Development, 9(5), 873–884. https://doi.org/10.242 47/ijmperdoct

[134.] Yzer, M. (2017). Theory of Reasoned Action and Theory of Planned Behavior. In The International Encyclopedia of Media Effects (pagg (pp. 1–7). American Cancer Society. https://doi.org/10.1002/9781118783764.wbieme0075.
[135.] Yzer, M. (2017). Theory of Reasoned Action and Theory of Planned Behavior. In The International Encyclopedia of Media Effects (pagg (pp. 1–7). American Cancer Society. https://doi.org/10.1002/9781118783764.wbieme0075.
[136.] Zaheer, H., Breyer, Y., & Dumay, J. (2019). Digital entrepreneurship: An interdisciplinary structured literature review and research agenda. Technological Forecasting and Social Change, 148, Article 119735. https://doi.org/10.1016/j. techfore.2
[137.] Zarazua de Rubens, G. (2019). Who will buy electric vehicles after early adopters? Using machine learning to identify the electric vehicle mainstream market. Energy, 172, 243–254. https://doi.org/10.1016/j.energy.2019.01.114
[138.] Zhao, Y., Guo, Y., Guo, Q., Zhang, H., & Sun, H. (2020). Deployment of the Electric Vehicle Charging Station Considering Existing Competitors. IEEE Transactions on Smart Grid, 11(5), 4236–4248. https://doi.org/10.1109/TSG.2020.2991232
[139.] Zupic, I., & Cater, ˇ T. (2015). Bibliometric methods in management and organization. Organizational Research Methods, 18(3), 429–472.