A Study on Factors Influencing Consumers' Decision to Purchase Two-Wheelers – A Bibliometric Analysis: 2011-2025

V Sudhir[*]
N M K Bhatta[**]
Joshin John[***]

Abstract:

The global two-wheeler market has witnessed a consistent trajectory of growth in terms of technological advancements and rising market penetration. Earlier, the industry was predominantly manufacturer-driven, where product offerings were largely based on internal capabilities aimed to satisfy customer expectations. Over time, a paradigm shift occurred where manufacturers increasingly aligned their product development strategies to the evolving customer needs. In recent years, however, these needs have become markedly dynamic, necessitating a deeper understanding of the factors influencing consumer purchasing decisions. This study endeavours to elucidate the determinants of two-wheeler purchase behaviour using bibliometric analysis. A total of 460 scholarly articles, published between 2011 and 2025, were retrieved from the Scopus database. Using guidelines of PRISMA, a systematic screening of 460 articles was done to select 44 relevant articles for analysis. The metadata for these articles was extracted in CSV format and subsequently analysed using the RStudio package. Results indicate that most of the research has been done during the years 2021, 2022, and 2024, as 55% (24 articles) of the publications are from this time. The analysis revealed that India and Indonesia are the most prolific contributors to the articles in this domain. Four major universities/institutions were notably affiliated with a substantial volume of publications, from 2021 to 2025. Emerging keywords such as "purchase intention," "electric motorcycle," "electric vehicle," and "technology adoption" have gained prominence over the past three years, signalling a shift in research focus. Thematic analysis further identified "purchase behaviour," "consumer attitude," and "product innovation" as evolving themes, suggesting rich avenues for future exploration. This bibliometric inquiry not only synthesises current scholarly discourse but also provides strategic guidance for future research by highlighting influential authors, pertinent sources, and potential institutional collaborators. This study uses articles from the Scopus database, Web of Science, ScienceDirect, and ABDC, to get a deeper insight. As China and Malaysia have a larger contribution to the growth of two-wheelers, including articles published from these two countries, can further enrich the quality of the analysis.

Key words: *Purchase intention of two-wheelers, purchase behaviour, customer attitude.*

[*] Research Scholar, Xavier Institute of Management and Entrepreneurship, Bengaluru, A recognized Research Centre of the University of Mysore

[**] Professor & Dean Ph.D. Programme, Xavier Institute of Management and Entrepreneurship, Bengaluru, A recognized Research Centre of the University of Mysore

[***] Associate Professor & Research Guide, Xavier Institute of Management & Entrepreneurship, Bengaluru, A recognized Research Centre of the University of Mysore

A
b
s
t
r
a
c
t

1. Introduction:

The adoption of two-wheeler transportation has witnessed a remarkable surge across India and several Asian nations over the past few decades. This upward trend is largely attributed to accelerating urbanisation as per Huu & Ngoc (2021) and intensifying traffic congestion. This has collectively reshaped consumer mobility patterns, nudging them toward more agile and efficient transport alternatives. In many rapidly developing urban centres particularly in India and other populous Asian countries the struggle to expand infrastructure in tandem with the exponential growth of vehicular populations has further underscored the practicality and utility of two-wheelers. As per study by Verma (2022) two wheeler industry has contributed as share of 80% of total market of vehicles in India. These vehicles offer a cost-effective, fuel-efficient, and manoeuvrable mode of transportation that is especially advantageous in densely populated and traffic-prone environments.

In terms of usage intensity, India parallels nations such as Vietnam, Indonesia, Thailand, and the Philippines. The widespread appeal of two-wheelers in these contexts stems not only from economic affordability, including lower vehicle costs, reduced fuel consumption, minimal parking fees, and low total cost of ownership, but also from their utility in time-constrained, congested urban settings. Furthermore, Indian consumers benefit from a broad spectrum of product offerings, ranging from budget-friendly commuter motorcycles to premium scooters and advanced electric or hybrid two-wheelers, thus expanding their motivation and capacity for ownership.

Given these dynamics, it is imperative that policymakers, urban planners, and industry stakeholders investigate the determinants that influence consumer preferences and ownership behaviour concerning two-wheelers. A nuanced understanding of usage patterns and buyer motivations is essential for devising urban mobility strategies that are both practical and sustainable. The decision to purchase a two-wheeler is shaped by a constellation of economic, functional, psychological, and socio-cultural factors as per Jayasingh et al.

(2021). In India and comparable Asian markets, affordability remains a predominant determinant, especially among middle- and lower-income segments. The relatively low initial acquisition cost, coupled with accessible financing schemes, enhances the financial appeal of two-wheelers across a broad demographic spectrum.

Amid rising fuel prices and escalating commuting demands, as per study done by Kamala et al., (2024) and Chanda et al. (2019), fuel efficiency has emerged as a decisive purchase criterion. Functional aspects such as mileage, maintenance costs, engine capacity, and design features play a crucial role in shaping buyer preferences. The compact size and high manoeuvrability of two-wheelers enable efficient navigation through congested cityscapes and narrow urban bylanes. Brand credibility, after-sales service quality, resale value, and technological features such as smartphone integration and electric variants are increasingly being considered in consumer evaluations.

In addition to these pragmatic considerations, emotional and lifestyle factors have become influential in purchase decisions. For instance, younger consumers are often driven by brand image, aesthetics, and the experiential dimension of riding as per Bansal et al., (2021), while family-oriented buyers prioritise safety, comfort, and reliability. Over time, as per study of Kumar (2024), environmental consciousness is becoming an increasingly relevant factor, particularly with the advent and adoption of electric two-wheelers, reflecting growing societal concern for ecological sustainability.

In an effort to systematically identify and synthesise the variables that govern consumer purchase behaviour in the two-wheeler segment, this study undertakes a bibliometric review of extant literature. Scholarly documents indexed in the Scopus database were surveyed.

2. Literature Review

2.1. Bibliometric Analysis

Passas (2024) articulates the core methodological framework of bibliometric analysis, emphasising its applicability for comprehensive literature reviews involving large datasets. The author posits that this

approach is particularly effective for mapping scholarly fields, identifying seminal publications, influential authors, and leading journals that have shaped academic discourse, while also tracing the evolution of research themes over time. Similarly, Donthu et al. (2021) describe bibliometric analysis as a rigorous scientific methodology that serves both established scholars and emerging researchers by enabling a systematic retrospective examination across a broad spectrum of research domains in business studies.

In another pertinent study, Ahmi & Mohamad (2019) employed bibliometric techniques to analyse global scholarly output on web accessibility using data retrieved from the Scopus database. Their findings illustrate the efficacy of bibliometric analysis as a quantitative tool for tracking research proliferation, examining publication trends, assessing geographic and institutional contributions, and uncovering key research themes through citation and keyword network analyses. They further identified prominent journals and institutions contributing to the field, while also outlining promising avenues for future research.

In a related endeavour, Merigó & Yang (2017) conducted a bibliometric investigation of the "Operations Research and Management Science" discipline using data sourced from the Web of Science database. Their study provided insights into the most impactful journals, the productivity and influence of individual authors, and the intellectual structure of the field, thereby reinforcing the value of bibliometric methods for evaluating scholarly influence and thematic developments within a research area.

2.2. Factors Influencing Consumers' Buying Decisions

To understand the customer buying behaviour towards two-wheelers, some of the recent and relevant studies were reviewed. From this review, some of the influencing factors are discussed as below. Summary of findings by Researchers

Author	Objective of study	Methodology	Key Finding
Kamala et al., (2025)	To identify different factors that influence customer perception of motorcycles	Used questionnaires, Convenient sampling method	Mileage, Engine performance, brand value, price factor, Loan facility were positive perceptions for purchase decision.
Reganathan et al., (2016)	To find out the factors influencing the consumer behaviour of Honda two-wheelers	Used a questionnaire for data collection, and the SPSS package for data analysis.	Comfort, brand image, pick-up/power, and television media were factors deciding the buying decision.
Pai et al., (2014)	To find factors that determine the adoption of the idle stop system in Taiwan	Survey questionnaire, mixed logit model	Fuel price, tax rebate incentive, and financial support are factors for adopting the idle start system.
Suharyanti et al., (2015)	To evaluate the role of the country of origin in the purchase decisions of consumers	Qualitative research method used with homogeneous sampling.	Quality of product & brand image are major stimuli, along with style, gentlemen's ride & elegance are major influencing factors.
Amsaveni et al. (2014)	To analyse the factors influencing women in the purchase of a two-wheeler	A descriptive study, survey questionnaire, and SPSS package will be used for data analysis.	Mileage, brake efficiency, and maintenance cost were major factors influencing women's purchase decisions.
Aprilianus et al. (2018)	To analyse the factors of choosing motorcycle in Puruk Cahu	Accidental sampling method, survey questionnaire.	Fuel consumption, easy maintenance, product price, and credit facility are factors considered for motorcycle purchase.

Waworuntu et al., (2023)	To study the impact of brand, promotion & innovation on consumer purchasing behaviour.	Accidental sampling method, survey questionnaire.	Riding experience, safety systems, attractive offers, intelligent gadgets, and distinctive design are major factors influencing purchasing behaviour
Pulungan et al., (2018)	To study the influence of innovation, attitude and advertisement attraction on the decision to buy a Yamaha motorcycle.	Quantitative research. A multiple linear regression analysis model was used.	Innovative features, brand trust, and effective advertisement have a significant effect on the purchase decision for Yamaha motorcycles.
Bansal et al., (2021)	To evaluate the preferences of Indian two-wheeler buyers	Quantitative study. Discrete choise model used for analysis	The top five parameters that influence customers to buy a two-wheeler are style, fuel economy, comfort, brand, and engine performance
Yuniaristanto, et al., (2022).	To investigate key factors influencing the purchase intention of electric motorcycles.	Qualitative study, Partial least squares – structural equation model used for analysis.	Macro level factors like charging infrastructure & incentive policy, cost factor, technology are most influencing factor for purchasing of electric motorcycle.
Patil et al., (2024)	To analyse different factors influencing the purchase of electric vehicles, along with demographic parameters in India.	Quantitative study with survey questionnaires. ANOVA is a statistical model.	Initial buying cost, charging infrastructure & purchase incentive are top three factors for Indian buyers for purchasing electric vehicle Gender type has no influence on the result.
Chanda et al. (2019)	To explore Indian consumer's attitude towards sustainability & its effect on their decision-making while buying a two-wheeler	Quantitative study with survey questionnaires.	Fuel economy(FC) is the influencing factor. A study shows that two segments of customers are Active and sustainable, where FC is a must, while Wannabe sustainable do not consider FC as a factor.
Jayasingh et al., (2021)	To study factors that influence the adoption of electric two-wheelers based on consumers' intention.	Online survey questionnaire. Purposive sample technique used. Partial least squares structural equation modelling using R software for analysis	Reduced fuel cost and maintenance cost, charging infrastructure are influencing factors. Based on gender study male has more influence than female.

3. Methodology

3.1. Data Source

A comprehensive review of bibliographic literature was undertaken utilising the primary corpus of the Scopus database to examine prevailing trends, impacts, and thematic developments concerning consumer intentions toward the purchase of two-wheeler vehicles. Scopus was selected due to its extensive coverage, encompassing the highest volume of peer-reviewed journals across a wide array of disciplines, including science, engineering, medicine, social sciences, management, and the humanities. The database maintains rigorous inclusion criteria, ensuring that indexed journals meet high standards of academic quality and reliability.

Given that the intended methodological framework involves bibliometric analysis using RStudio, Scopus was further preferred for its seamless integration with this analytical environment. Moreover, Scopus is widely recognised and adopted by leading academic institutions and research organisations globally. Consequently, Scopus was deemed the most appropriate and credible source for sourcing literature pertinent to the selected research theme.

3.2. Data Collection

To effectively extract relevant literature from the Scopus database, the researcher has clearly defined three fundamental components:

1. **Research Topic**: The focal point of the investigation must be clearly articulated. In this case, the study centres on identifying the *factors influencing consumers' decisions to purchase two-wheelers*.

2. **Keyword Strategy**: Carefully selected keywords form the basis for database querying. For the present study, keywords such as *"two-wheeler"*, *"motorcycle"*, *"scooter"*, *"bike"*, *"purchase"*, *"buying"*, and *"owning"* were employed to ensure comprehensive coverage of the thematic scope.

3. **Screening Parameters**: Criteria for filtering relevant documents must be established to refine the dataset for bibliometric analysis. For this study, records were limited to the publication period from *2011 to 2025*, with the following additional constraints: *document type = article*, *language = English*, and *source type = journals*.

To ensure methodological rigour and replicability, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework was utilised to guide the process of identification, screening, and selection of articles. An initial query was executed in Scopus using the search expression: TITLE-ABS-KEY ("two wheeler" OR "two-wheeler") AND ("purchase" OR "buying" OR "owning"), Which yielded *460* records.

- **First-level screening** involved applying the pre-established filters—publication year,

document type, language, and source type—resulting in the exclusion of *178* articles.

- **Second-level screening** entailed a review of the titles of the remaining records, which led to the elimination of *208* articles deemed irrelevant.

  Third-level screening involved a detailed review of abstracts for the remaining *77* records, from which *33* were excluded based on thematic misalignment.

Ultimately, *44* scholarly articles aligned with the research theme—*factors influencing consumer decisions to purchase two-wheelers*—were finalised for bibliometric analysis. **Figure 1** provides a visual representation of the PRISMA-based screening and selection process.
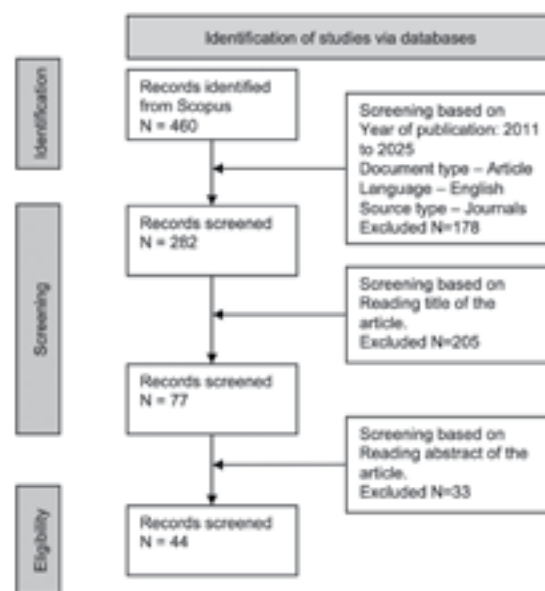

Figure 1

PRISMA flow diagram of the literature review process for studying the factors Influencing consumers decision for buying two wheeler.

3.3. Data Analysis

The finalised set of 44 articles was subjected to bibliometric analysis using the RStudio environment. RStudio is a software tool that uses the R programming language. It helps users analyse data, create visualisations, and build statistical models easily. Researchers and data analysts use RStudio for tasks like data cleaning, plotting graphs, and

running complex analyses. This analytical process was undertaken to assess the scholarly quality and intellectual structure of the selected literature, with particular emphasis on identifying prolific authors, thereby offering potential avenues for academic collaboration. Furthermore, the analysis facilitated the identification of core publication sources, enabling researchers to strategically target relevant journals for literature exploration. It also highlighted key institutional affiliations—such as universities and research centres—that serve as influential contributors within the field, thus offering guidance for prospective academic engagement.

In addition, the bibliometric approach enabled the temporal mapping of research themes, offering insights into the evolution and emerging trajectories of scholarly discourse over time. The analysis was operationalised through RStudio by importing bibliographic data exported in CSV format from the Scopus database, ensuring methodological rigour and reproducibility.

4. Results and Discussion

4.1. Analysis of Documents Occurrence (by year, country, area of topic)

Following the article screening process, a total of 44 publications were selected for bibliometric analysis using the RStudio platform. These articles specifically address research pertaining to the factors influencing consumer decisions in the purchase of two-wheelers. **Figure 2** illustrates the longitudinal trend in scholarly output within this domain, while **Table 1** presents the annual distribution of publications. A notable increase in publication activity is observed during the period from 2021 to 2025, indicating a heightened academic interest in consumer behaviour related to two-wheeler acquisition. Specifically, the years 2022 and 2024 account for 18% and 23% of total publications, respectively, underscoring a substantial surge in scholarly engagement with this theme.

The upward trend in publication volume during this timeframe appears to be correlated with the market emergence and growing adoption of electric two-wheelers. This technological shift likely spurred increased inquiry into how such innovations are reshaping consumer decision-making processes.

Figure 3, represented as a three-field plot (Article–Author–Country), provides a visual representation of the geographic and scholarly distribution of the analysed article. The dataset encompasses contributions from nine countries, with a notable predominance of Asian nations, followed by select European countries. **Figure-4** further highlights the most frequently cited countries within the dataset.

Figure-5 identifies the most influential journals and publication sources referenced within the dataset. *Sustainability* emerges as the leading source with four articles, followed by *Case Studies on Transport Policy* and the *Journal of Cleaner Production*, each contributing three articles. An additional four sources contributed two articles each, while three sources were represented by a single publication. This distribution reflects authorial preferences in selecting publication outlets and may serve as an indicator of perceived credibility and relevance within the scholarly community.
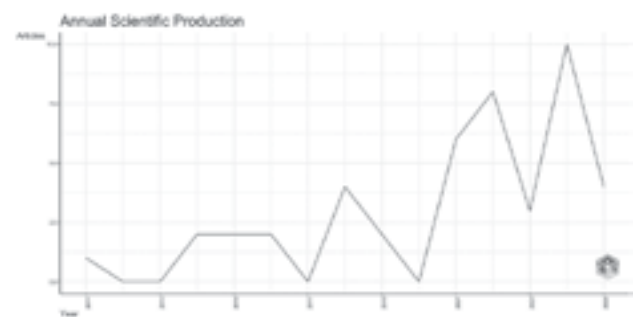

Figure-2:

Annual Scientific Production (Source: Scopus)

Year	No. of publication	%
2011	1	2%
2014	2	5%
2015	2	5%
2016	2	5%
2018	4	9%
2019	2	5%
2021	6	14%
2022	8	18%
2023	3	7%
2024	10	23%
2025	4	9%

Table-1:

Publication on factors influencing intention to purchase a wheeler
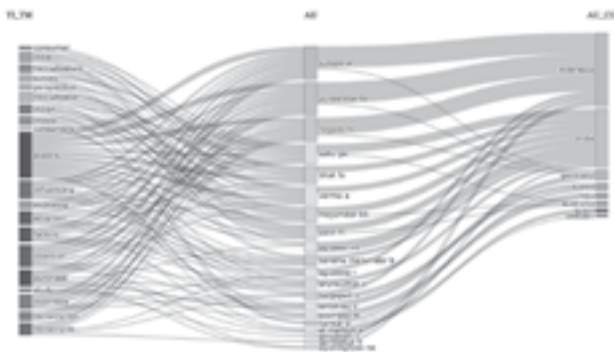
Figure-3:

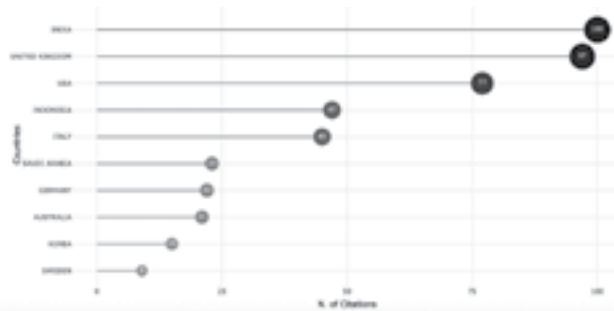*Three field plot Article-author-country*

Figure-4:

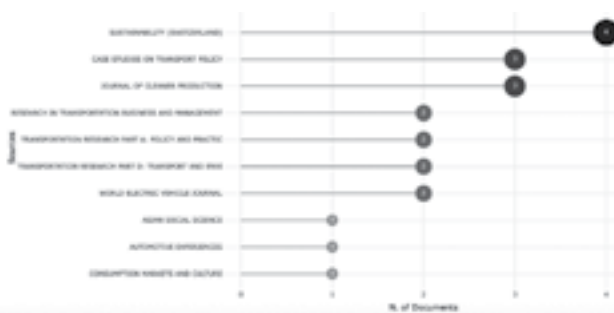*Most global cited documents (Source: Scopus)*

Figure-5:

Most relevant sources (Source: Scopus)

4.2. Analysis of Keyword

The bibliometric analysis conducted on the final set of articles concerning the identification of factors influencing consumer purchase decisions for two-wheelers has facilitated an in-depth examination of keyword usage patterns. Specifically, the analysis

explored keyword frequency, the emergence of new terms, and the co-occurrence of keywords among various authors. A total of 52 distinct keywords were identified as frequently used across the reviewed literature.

Figure-6 presents a word cloud that visualizes the distribution and frequency of these keywords. Prominent among them are *"electric motorcycle"*, *"technology adoption"*, *"purchase intention"*, and *"electric vehicle"*, indicating their dominance and emerging significance in recent scholarly discourse. To further illustrate this distribution, the keywords were organized into a **tree map** (Figure-8), revealing that *"electric vehicle"*, *"purchase intention"*, *"electric vehicles"*, and *"electric motorcycle"* are the most recurrent terms utilized by authors to investigate consumer behavioural influences.

Figure-7, which represents a three-field plot mapping *keywords–authors–countries*, demonstrates that many of the most frequently used keywords appear consistently across diverse author profiles and national contexts. This suggests a high degree of thematic alignment and potential cross-border collaboration in this area of research.

Moreover, temporal analysis indicates that terms such as *"purchase intention"*, *"electric motorcycle"*, *"electric vehicle"*, and *"technology adoption"* have emerged prominently over the past three years. This trend is complemented by earlier recurring keywords like *"electric vehicles"*, *"electric scooter"*, and *"perception"*, which were commonly featured in publications prior to 2022, as illustrated in **Figure-9.**
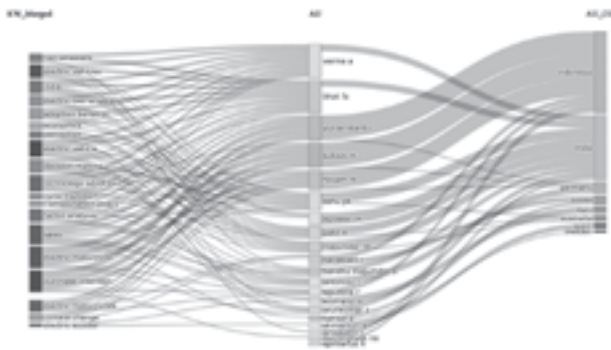

Figure-6:

Word cloud of keywords. (Source: Scopus)

Figure-7:

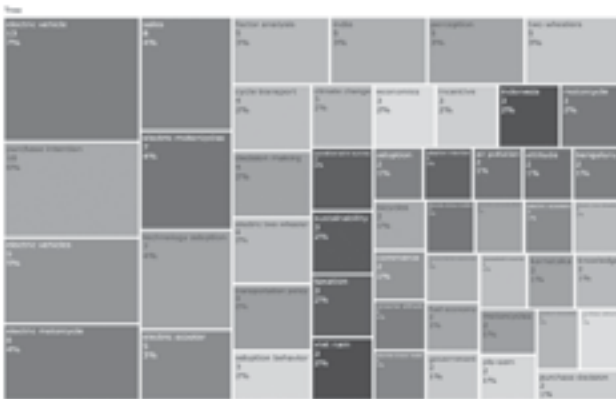*Three field plot: keyword-author-country. (Source: Scopus)*

Figure-8:
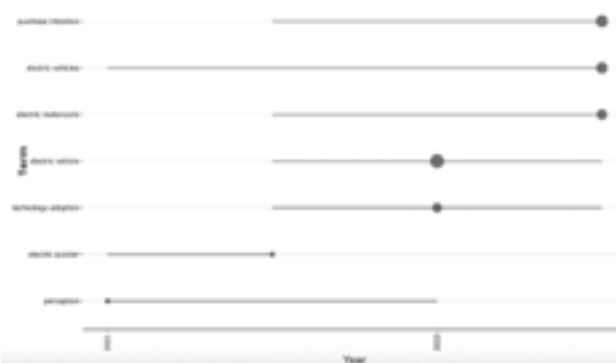
Tree-map of keywords. (Source: Scopus)

Figure-9:

Trend of keywords (Source: Scopus)

4.3. Analysis of Authors

Figure-10 illustrates the most prominent authors contributing to the scholarly discourse on factors influencing consumer decision-making in the context of two-wheeler purchases. Among these, *Sutopo W.* and *Yuniaristanto*, both affiliated with institutions in Indonesia, emerge as the leading contributors, each with four publications. *Hisjam M.*, based in India, follows with three publications. Additionally, six other authors have each published two articles, while *Agrawal V.K.* is noted for a single contribution. This visualization underscores the relative dominance and scholarly engagement of specific authors in advancing research on consumer behavior in the two-wheeler market.

To further evaluate authorial influence and research productivity, bibliometric analysis employs the **H-index** a metric that reflects both the volume and citation impact of an author's publications within a defined domain. As shown in **Figure-11,** authors *Hisjam M.*, *Sutopo W.*, and *Yuniaristanto* each possess an H-index of 3, indicating a notable impact within the field. The majority of remaining contributors exhibit an H-index of 2, signifying consistent scholarly output and recognition. These findings suggest that the aforementioned authors are among the key influencers shaping research in this domain.

The **Author Collaboration Network**, presented in **Figure-12**, visually represents patterns of co-authorship within the analysed literature. In this network, nodes denote individual authors, connecting lines (edges) represent collaborative relationships, and clusters signify cohesive groups of researchers engaged in joint publication efforts. The analysis reveals 13 distinct collaborative clusters. One particularly prominent cluster, characterized by larger node sizes, indicates a well-established and highly productive research group. However, the absence of inter-cluster linkages suggests a lack of cross-collaborative engagement between different author groups, pointing to opportunities for broader interdisciplinary and international collaboration in future research efforts.
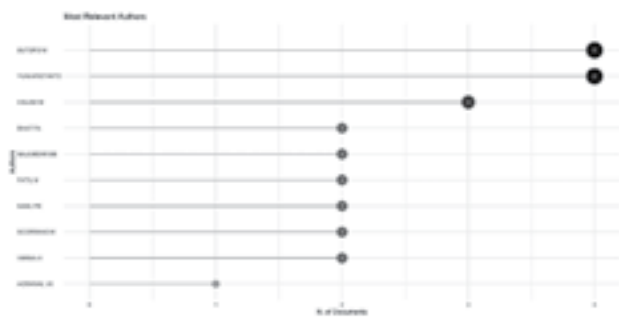
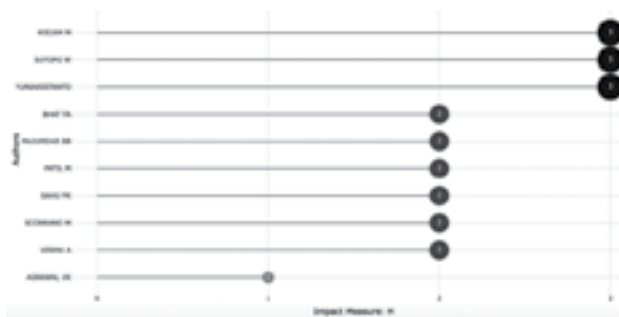**Figure-10:**
Most Relevant Authors (Source: Scopus)

Figure-11:
Authors' Local Impact

Figure-12:
Authors Collaboration Network (Source: Scopus)

4.4. Analysis of Sources

The results of the bibliometric analysis highlight the significance of identifying the **"Most Relevant Sources",** which serve as essential reference points for researchers seeking to conduct literature reviews or select appropriate outlets for publication within a specific domain. **Figure- 13** illustrates the ten most prominent journals contributing to the body of literature concerning factors that influence consumers' decisions to purchase two-wheelers.

Among these, four journals—*Sustainability (Switzerland)*, *Case Studies on Transport Policy*,

Journal of Cleaner Production, and *Research in Transportation Business and Management*—emerge as the most influential sources, consistently publishing research aligned with the focal theme. These journals not only host a considerable number of relevant studies but also provide strategic platforms for future researchers to consult and contribute to. Furthermore, **Figure-14** presents the temporal distribution of publications within these key journals, revealing a discernible upward trend in publication volume over the past three years—particularly within the top three sources. This increasing trajectory signifies a growing scholarly interest and research activity within this thematic area, underscoring the relevance and evolving importance of these journals.

Consequently, these findings provide a clear direction for researchers: both to access high-impact literature and to consider these journals as preferred venues for disseminating future research on consumer behaviour in the two-wheeler market. The designation of "Most Relevant Sources" thus plays a vital role in guiding academic inquiry and shaping future contributions in the field.
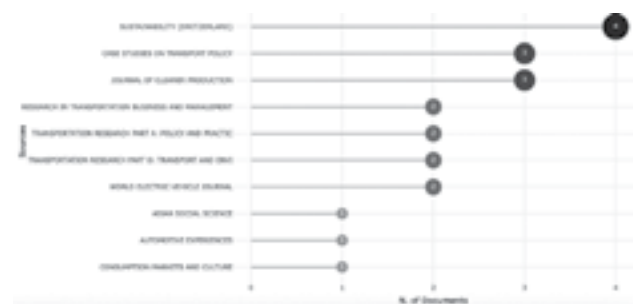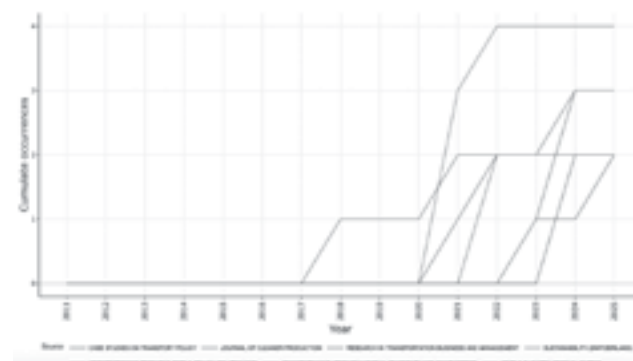

Figure-13:
Most Relevant Sources. (Source: Scopus)

Figure-14:
Sources' production over time. (Source: Scopus)

4.5. Analysis on Affiliation

Within the framework of bibliometric analysis conducted using RStudio, the metric of **"Most Relevant Affiliation"** offers valuable insights into the academic institutions, universities, and research centres that have contributed significantly to a specific research domain—in this case, the factors influencing consumer purchase decisions regarding two-wheelers. As illustrated in **Figure-15**, the analysis identifies the leading institutions affiliated with the reviewed publications.

The top three institutions demonstrating substantial scholarly engagement in this field are *Universitas Sebelas Maret* (Indonesia), *Birla Institute of Technology and Science, Pilani* (India), and *Heilbronn University* (Germany), with 10, 5, and 5 publications respectively. Their high level of research output positions them as key centres of expertise in the domain and suggests potential opportunities for academic collaboration, consultation, and joint research initiatives.

For emerging researchers, these affiliations provide a valuable reference point for benchmarking methodologies and findings, as well as identifying potential academic partners. In addition to these leading contributors, eight other universities from various regions have collectively produced 24 publications, further reflecting the global academic engagement with this subject area.
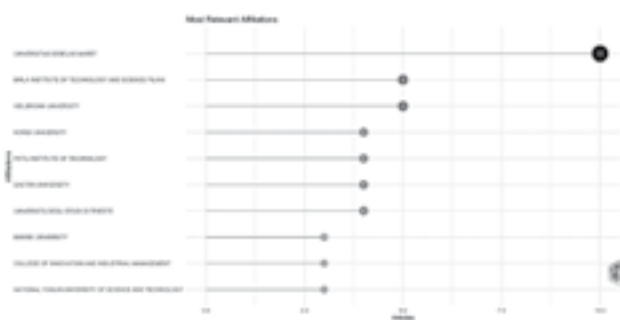

Figure-15:
Most Relevant Affiliation

4.6. Thematic Analysis

The thematic map serves as a strategic visualisation tool in bibliometric analysis, enabling the systematic classification of research topics based on two critical dimensions: *relevance* (plotted on the x-axis) and *degree of development*, or *density* (plotted on the y-axis). This two-dimensional framework facilitates the identification and prioritisation of research themes by evaluating their centrality within the field and the extent to which they have been conceptually and methodologically developed.

Themes situated in the lower-left quadrant—characterised by both low relevance and low development—are typically identified as *emerging or declining themes*. These areas may present valuable opportunities for future scholarly inquiry, particularly as they have not yet received substantial academic attention. Consequently, thematic mapping enables researchers to effectively visualise, organise, and prioritise research directions based on thematic maturity and academic significance.

Figure 16 presents the thematic map derived from the bibliometric analysis conducted using RStudio.

- Motor Themes: Topics such as *technology adoption*, *factor analysis*, *perception*, *decision making*, and *electric vehicles* are positioned in the upper-right quadrant, indicating both high relevance and a robust level of development. These represent well-established, central themes within the field.

- Basic Themes: For instance, the theme of *understanding influencing factors in motorcycle purchasing decisions* is deemed highly relevant but remains underdeveloped. Such topics may be foundational and warrant deeper exploration in future studies.

- Emerging Themes: Themes such as *purchase behaviour*, *attitude*, and *product innovation* are located in the lower-left quadrant. Although these topics currently exhibit lower relevance and limited scholarly development, they possess potential to evolve into critical areas of future research as the field advances.

Thus, the thematic map not only provides a snapshot of the intellectual landscape but also serves as a guidepost for identifying underexplored yet promising research avenues.
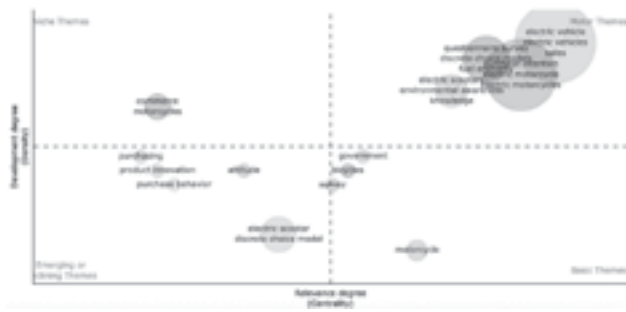
Figure-16:

Thematic Map. (Source: Scopus)

5. Conclusion and Implications

This study undertook a comprehensive bibliometric analysis of scholarly literature focused on the diverse factors influencing consumer decision-making in the context of two-wheeler purchases. A total of 44 relevant articles, published between 2016 and 2025, were examined. The analysis revealed a marked increase in scholarly output during the period from 2021 to 2024, with a substantial concentration of publications originating from four key academic sources. Notably, the majority of contributions stemmed from countries such as **Indonesia** and **India**, indicating regional leadership in this research domain.

Institutional analysis identified three prominent universities—*Universitas Sebelas Maret*, *Birla Institute of Technology and Science, Pilani*, and *Heilbronn University*—as major centres of scholarly activity related to this topic. Furthermore, keyword analysis highlighted the prominence and increasing frequency of terms such as *"electric motorcycle"*, *"technology adoption"*, *"purchase intention"*, and *"electric vehicle"*, signalling their emergence as central themes in contemporary research.

The **thematic analysis** suggested that *purchase behaviour*, *attitude*, and *product innovation* are emerging themes with potential for future exploration, given their current underdevelopment yet growing relevance.

The findings of this study hold practical implications for industry stakeholders, particularly in guiding the design and development of two-wheeler products that align with evolving consumer preferences and sustainability objectives. By elucidating the underlying factors shaping consumer intentions and behaviours, this research contributes to both academic knowledge and industrial practice.

Moreover, by analysing recurring keywords, prevailing research trends, influential authors, and institutional affiliations, the study offers valuable guidance for future researchers. It provides a structured foundation for identifying collaborative opportunities, refining research focus, and advancing the scholarly discourse surrounding consumer behaviour in the two-wheeler segment.

6. Limitations

One of the limitations of this study lies in its exclusive reliance on the **Scopus** database for the systematic literature search. While Scopus offers a comprehensive repository of high-quality academic publications, the exclusion of additional scholarly databases such as **Web of Science, ScienceDirect,** and **ABDC** potentially restricts the breadth and depth of the literature reviewed. Incorporating data from these sources could enhance the comprehensiveness of the bibliometric analysis and yield a more holistic understanding of the research landscape.

Furthermore, the analysis revealed a predominance of contributions from **India** and **Indonesia**, reflecting strong academic engagement from these regions. However, countries such as **China** and **Malaysia**—which have played a substantial role in the proliferation and development of the two-wheeler market—were underrepresented in the dataset. Future research would benefit from a broader inclusion of articles published in journals originating from these countries, thereby enriching the analysis and offering deeper insights for constructing a robust theoretical and empirical framework for subsequent investigations.

References

Ahmi, A., and Mohamad, R. (2019). Bibliometric analysis of global scientific literature on web accessibility. *International Journal of Recent Technology and Engineering (IJRTE), 7*(6), 250–258

Amsaveni, R., and Kokila, R. (2014). A Study on Satisfaction Levels of Working Women

Towards Two Wheelers in Coimbatore, Tamil Nadu. *Indian journal of marketing*, *44*(5), 44-55.

Aprilianus, H., and Radam, I. F. (2018). Analysis of Factor of choosing Motorcycle in Puruk Cahu. *International Journal of Civil Engineering and Technology*, *9*(8), 594-602.

Bansal, P., Dua, R., Krueger, R., & Graham, D. J. (2021). Fuel economy valuation and preferences of Indian two-wheeler buyers. *Journal of Cleaner Production*, *294(1-2)*, 126328.

Chanda, R., Pabalkar, V., and Mishra, T. (2019). Exploring the factors that lead to a positive behaviour in Indian consumers purchasing a sustainable – fuel efficient two wheeler. *International Journal of Innovative Technology and Exploring Engineering, 8*(11S).

Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research, 133*, 285–296Huu, D. N. and Ngoc, V. N. (2021). Analysis study of current transportation status in Vietnam's urban traffic and the transition to electric two-wheeler mobility. *Sustainablity 2021, 13*, 5577, https://doi.org/10.1016/j.jbusres.2021.04.011

Jayasingh, S., Girija, T., & Arunkumar, S. (2021). Factors influencing consumers' purchase intention towards electric two-wheelers. *Sustainability*, *13*(22), 12851.

Kamala, S., & Thaiyalnayaki, M. (2025). Impact of information sources on customer satisfaction towards two-wheelers with special reference to Chennai city. *Indian Journal of Information Sources and Services, 15*(1), 345–349Kumar, S. (2024). Determining Factors Influencing Consumers' Purachse Decisions for Green products: An Analytical study of Delhi. *European Journal of Theoretical and Applied Science, 2*(6), 170-183.

Merigó, J. M., and Yang, J.-B. (2017). A Bibliometric Analysis of Operations Research and Management Science. *Omega (United Kingdom), 27*(1), 71-100.

Pai, C. W., Jou, R. C., & Kuo, M. S. (2016). An investigation of factors that determine motorcyclists' adoption of an idle-stop system in Taiwan. *International Journal of Sustainable Transportation, 10*(3), 216-224.

Pulungan, D., Fauzi, A., & Rini, E. S. (2018). The Effect of Product Innovation, Consumer Attidude and Advertising at the Purchase Decision of Yamaha Motorcycle in CV Sejati Mitra Motor Medan Marelan. International Journal of Scientific & Tehnology Research, w7 (12), 222-226.

Passas, I. (2024). Bibliometric Analysis: The Main Steps. Encyclopedia, 4(2), 1014-1025. https://doi.org/10.3390/encyclopedia4020065

Patil, L. N., Bhosale, D. G., Patil, Y. M., Bhagat, G. P., Patil, A. A., Satpute, S. S., & Agrawal, V. K. (2024). Investigation on different parameters associated with purchase of electric vehicle in India. *Case Studies on Transport Policy*, *15*, 101152.

Renganathan, R., Vijayabanu, C., Srinivasakumar, V., and Vijayanand, V. (2016). Rural Customers' Attitude and Satisfaction towards Honda two wheeler and Show room services, Tiruvarur. *Indian Journal of Science and Technology 9*(27), 1-6.

Suharyanti, B. S. W., and Rostika, M. (2015). Riding the Country, Buying the Brand: How Country-of-Origin Image Drives the Purchase Behavior of Big Motorcycle in Indonesia. *Asian Social Science*, *11*(27), 185.

Yuniaristanto, Y., Utami, M. D., Sutopo, W., & Hisjam, M. (2022). Investigating key factors influencing purchase intention of electric motorcycle in Indonesia. *Transactions on Transport Sciences*, *13*(1), 54-64.

Verma, A., and Bedi, M. (2022). Growth Drivers and Emerging Issues for Two-Wheeler Industry in India. In *CONFERENCE PROCEEDING OF INTERNATIONAL MULTIDISCIPLINARY CONFERENCE 2022*, p. 258. 2022.

Waworuntu, A. Y., & Hajar, H. (2023). Brand, Promotion and Innovation: Their Impact on Motorcycle Purchasing Decisions. Advances: *Jurnal Ekonomi* (3), 150-157