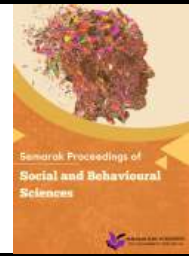




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Trends And Research Bike E-Hailing Intent as A Function of User Behavioral Intentions a Bibliometric Analysis

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ABSTRACT

E-business can now reap the benefits of the increasing use of the Internet in Malaysia. Such marketers understand a factor that influences behavior intention in using E-hailing among students while maintaining their existing online customers, which is vital to developing their marketing strategies. This study report may provide readers with additional information on the topic. The study includes a comprehensive examination of 95 publications collected between 2018 and 2026. This essay will focus on the findings of significant writers, publications, nations/regions, and fields of study. This article also attempted to discover many themes that evolved and evolved during the active years through the use of co-citation and co-occurrence networks. Because of the growing number of research articles and the widespread adoption of Bike Hailing in many countries, bibliometric analysis must be used to provide a comprehensive set of data that can help researchers find the most relevant work to date. This can be achieved by utilizing the VOS Viewer and Biblioshiny tools to explore different facets of the Bike Hailing research topic and discover potential future study directions.

Keywords: Bike hailing; E-hailing; behavior intention; social limitation; safety; bibilometric analysis; VOSviewer

1. Introduction

Behavior intention in using bike E-hailing has been affected by motivators of passenger intention to ride and re-ride public transportation. Where strong motivators of passenger intention to ride and re-ride public transportation are found to include passenger contentment with facilities, service satisfaction, travel convenience, and service quality, which "was also undertaken by Yunoh *et al.*, [18]". For example, customers will find the lowest price and best quality of transportation for travel. Thus, to better serve their customers, e-hailing businesses should also analyze what influences riders' decisions to utilize their services. Hence, motivators of passenger intention are needed by the transportation companies to have customers. The most relevant is the title E-business can now reap the benefits of the increasing use of the Internet in Malaysia. Such marketers understand a factor that influences behavior intention in using E-hailing among students while maintaining their existing online customers, which is vital to developing their marketing strategies. Where this transportation management in Malaysia needed to fit their transportation system with the current era to reach

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customers. Which the growth of digital has made people adept with online matters. Thus, the transportation management in Malaysia needed to have an online transportation system such as bike E-hilling or any E-hilling transportation companies to reach customers and needed to look at customer safety. For example, users of ride-hailing apps seek reassurance that their personal information will be safe. Using ride-sharing services has always been met with skepticism from customers, who worry about their own personal safety, the protection of their belongings, and their insurance coverage, as reported by, which "was also undertaken by Teo *et al.*, [15]". If e-hailing services want to gain their consumers' confidence, they'll need to find a solution to this issue. Hence, the study is going to focus on investigate the factors of cause to behavior intention in using bike E-hailing.

Behavior intention in using bike E-hailing has been affected by motivators of passenger intention to ride and re-ride public transportation. Where strong motivators of passenger intention to ride and re-ride public transportation are found to include passenger contentment with facilities, service satisfaction, travel convenience, and service quality, which "was also undertaken by Yunoh *et al.*, [18]". For example, customers will find the lowest price and best quality of transportation for travel. Thus, to better serve their customers, e-hailing businesses should also analyze what influences riders' decisions to utilize their services. Hence, motivators of passenger intention are needed by the transportation companies to have customers. Besides that, the attitude factor has been affecting behavior intention in using bike E-hailing. Where attitude is "a psychological inclination manifested by judging a certain thing with some degree of favor or disfavor", which "was also undertaken by Van Birgelen *et al.*, [4]". An individual's attitude is a synthesis of their appraisals of various items, and as a person's beliefs tend to be fixed in their minds, they play a significant role in shaping the individual's attitude toward those objects", which "was also undertaken by Agarwal *et al.*, [11]". Thus, Individuals' perceptions and sentiments regarding a product or service, as expressed in their responses, serve as the basis for an attitude assessment", which "was also undertaken by Herbert *et al.*, [7]". Hence, to the transportation need to fit their business service with the customer to understand their customer attitude on using the service.

More than that, the safety factor has been affecting behavior intention in using bike E-hailing. Where all e-hailing firms and drivers should prioritize passenger safety. While customers certainly do care about saving money, it doesn't imply they're willing to compromise on safety. Thus, users of ride-hailing apps seek reassurance that their personal information will be safe. Using ride-sharing services has always been met with scepticism from customers, who worry about their own personal safety, the protection of their belongings, and their insurance coverage, which "was also undertaken by Teo *et al.*, [15]". Hence, if e-hailing services want to gain their consumers' confidence, they'll need to find a solution to this issue. Other than that, the marketing factor has been affecting behavior intention in using bike E-hailing. Where the term "marketing" refers to the process of exchanging information and interacting with a target market in order to increase the value of a product or service and/or get a desired outcome, which "was also undertaken by Iwu [9]". These days, almost everyone makes use of social media. Using these platforms, it is simple to influence the public and disseminate information. As a result of the proliferation of social media platforms, businesses can now market their wares directly to consumers while also having open lines of communication with them, which "was also done prior research [16,17]". Many businesses now use social media to promote their products and services via advertisements and other means.

Not that only, the social limitation factor has been affecting behavior intention in using bike E-hailing. Where preliminary studies indicated that single women made regular use of the OTS. At the same time, concerns have been raised about the safety of passengers, particularly women. Several recent studies focused on this topic and presented fresh information on victims who were female

airline passengers. Hence, having more women in the workforce is a societal benefit in and of itself. Lastly, the price factor has been affecting behavior intention in using bike E-hailing. Where Consumers place a premium on affordability when making purchase decisions. A person's "perceived price" is their opinion of the item's value given the asking price, which "was also undertaken by Yunoh *et al.*, [18]". Cost, or "perceived price," in ridesharing services refers primarily to the prices paid by, which "was also undertaken by Teo *et al.*, [15]". In the transportation market, where e-hailing services dominate, clients continue to prioritize cost. Price is a crucial factor that impacts affordability in connection to fares paid and service offered in the transportation business, which "was also undertaken by Brewer *et al.*, [5]". With the current situation, the use of digital and online as more because make life easy. The companies need to fit with the current digitization world. Where digitization is an important tool of running the firm operation to optimize the performance. Thus, this also needs to reach the customer by having online transportation services such as online taxis.

The behavior intention in using bike E-hailing has been affected by attitude, safety, social limitation, marketing, and price. Where the dictionary defines intention as "something which is meant, a purpose or goal", which "was also done prior research [16,17]". A person's behavioral intention may be described as their choice, plan, or commitment to do some kind of action, which "was also undertaken by Fayolle *et al.*, [8]". Strong motivators of passenger intention to ride and re-ride public transportation are found to include passenger contentment with facilities, service satisfaction, travel convenience, and service quality, which "was also undertaken by Yunoh *et al.*, [18]". To better serve their customers, E-hailing businesses should also analyze what influences riders' decisions to utilize their services. Many factors of intent to use E-hailing services, such as subjective norms, simplicity of use, accessibility, convenience, and dependability, have been discovered in prior research. E-hailing pricing, travel companions, and passenger characteristics were also important factors in travelers' decisions to use this method of transportation, which "was also undertaken by Zhong *et al.*, [19]". Promo codes and stress-free rides may go a long way toward retaining and attracting new users of E-hailing services, both of which are essential to the success of the industry as a whole. Besides that, the attitude factor has been affecting behavior intention in using bike E-hailing. Where one of the most hotly debated topics in consumer behavior is the idea of attitude. Attitude is "a psychological inclination manifested by judging a certain thing with some degree of favor or disfavor", which "was also undertaken by Van Birgelen *et al.*, [4]". An individual's attitude is a synthesis of their appraisals of various items, and as a person's beliefs tend to be fixed in their minds, they play a significant role in shaping the individual's attitude toward those objects, which "was also undertaken by Agarwal *et al.*, [11]. According to ABD Rahim *et al.*, [1]", one's attitude might represent one's positive and negative emotional responses to psychological research. Attitudes have been shown to be effective predictors of actions and intentions in many settings, including those of a professional nature, which "was also undertaken by Morris *et al.*, [12]". In addition, according to ABD Rahim *et al.*, [1]", attitude may have a direct effect on environmental responsiveness since people's attitudes dictate the methods they employ to react to their surroundings. Individuals' perceptions and sentiments regarding a product or service, as expressed in their responses, serve as the basis for an attitude assessment ", which "was also undertaken by Herbert *et al.*, [7]".

More than that, the safety factor has been affecting behavior intention in using bike E-hailing. Where all E-hailing firms and drivers should prioritize passenger safety. While customers certainly do care about saving money, it doesn't imply they're willing to compromise on safety. Users of rider-hailing apps seek reassurance that their personal information will be safe. Using ride-sharing services has always been met with scepticism from customers, who worry about their own personal safety, the protection of their belongings, and their insurance coverage, which "was also undertaken by Teo

et al., [15]". If E-hailing services want to gain their consumers' confidence, they'll need to find a solution to this issue. In order to ensure the safety of its customers, the E-hailing service Grab has established measures such as requiring its drivers to provide proof of certified liability insurance and clean criminal records, which "was also done prior research [16,17]". Grab further guarantees the security of its clients' private information, which "was also undertaken by Yunoh *et al.*, [18]". Not that only, the social limitation factor has been affecting behavior intention in using bike E-hailing. Where for this purpose, GoJek is among the most well-known Online Transportation Companies (OTC). Given this context, preliminary studies indicated that single women made regular use of the OTS. At the same time, concerns have been raised about the safety of passengers, particularly women. Several recent studies focused on this topic and presented fresh information on victims who were female airline passengers. The National Police have learned from this mistake and now recommend that the OTC do the driver's physiological test out of an abundance of caution. Consequently, this study aimed to determine if there was a connection between the dangers of using an online transportation service and the gender of the passenger, which "was also undertaken by Meyliana *et al.*, [14]". Having more women in the workforce is a societal benefit in and of itself. Uber has promised to hire one million women as drivers by 2020, and the company has teamed with non-profits in India to launch iCare Live, a social venture that provides training for female drivers and assists them in obtaining commercial licenses.

Other than that, the marketing factor has been affecting behavior intention in using bike E-hailing. Where the term "marketing" refers to the process of exchanging information and interacting with a target market in order to increase the value of a product or service and/or get a desired outcome, which "was also undertaken by Iwu [9]". These days, almost everyone makes use of social media. Using these platforms, it is simple to influence the public and disseminate information. As a result of the proliferation of social media platforms, businesses can now market their wares directly to consumers while also having open lines of communication with them, which "was also done prior research [16,17]". Many businesses now use social media to promote their products and services via advertisements and other means. To attract and retain a specific target audience, as well as to motivate them to take action that is mutually beneficial to the brand (i.e., purchases), content marketing is a strategic marketing approach that emphasizes the production and dissemination of high-quality, regularly updated, relevant content, which "was also undertaken by Yunoh *et al.*, [18]". Various E-hailing firms have used social media as a content marketing platform because of the variety of roles and capabilities it provides. Importance of social media marketing on sites like Facebook, Instagram, and Twitter, and on messaging apps like WhatsApp, Telegram, Line, and WeChat, which "was also done prior research [16,17]". As members of "generation z" or "millennials," college students are prime targets for the E-hailing industry's content marketing campaigns. Because of this, they are more likely to give E-hailing services a go. Intention to use an E-hailing service may be affected by exposure to social media advertising, which "was also done prior research [16,17]". Lastly, the price factor has been affecting behavior intention in using bike E-hailing. Where Consumers place a premium on affordability when making purchase decisions. A person's "perceived price" is their opinion of the item's value given the asking price, which "was also undertaken by Yunoh *et al.*, [18]". Cost, or "perceived price," in ridesharing services refers primarily to the prices paid by riders, which "was also undertaken by Teo *et al.*, [15]". In the transportation market, where E-hailing services dominate, clients continue to prioritize cost. Price is a crucial factor that impacts affordability in connection to fares paid and service offered in the transportation business, which "was also undertaken by Brewer *et al.*, [5]". When customers have a far-flung destination to reach but a tight budget (such as college students), they often choose for E-hailing services that provide the best of both worlds in terms of pricing and quality. Typically, E-hailing firms will provide clients with discount

vouchers that may be used on future rides. The price of an E-hailing service might have a significant impact on a person's decision to utilize it, which "was also done prior research [16,17]".

This study used Attitude, safety, social limitation, marketing, and price positively and substantially impacted bike E-hailing behavior intention, according to Theory of Planned Behavior. However, Theory of Planned Behaviour predicts and explains IT installation and adoption, which "was also undertaken by Jokonya,[10]". TPB beliefs affect behavior, which "was also undertaken by Ajzen,[2]". TPB theory claims behavioral beliefs, normative expectations, and agency affect human behavior, which "was also undertaken by Jokonya,[10]". TPB argues people react rationally and progressively, which "was also undertaken by Raygor,[13]". New theory better explains and predicts human behavior. Researchers felt intention did not predict behavior. Especially outside-induced actions. The model's three behavior-predicting characteristics are below, which "was also undertaken by Ambak *et al.*, [3]". Thus, TPB will study bike E-hailing aim. According to DOI Theory, attitude, safety, social limitation, marketing, and pricing positively and significantly affect bike E-hailing behavior intention. The Diffusion of Innovation (DOI) Theory outlines how a product or concept spreads. Social systems follow trends. "Adopt" means "change" such as purchase or use a new product, acquire and perform a new behavior. Newness draws. Ride hailing e-marketing requires traditional taxi businesses to adapt its innovation to succeed, which "was also undertaken by Desta [6]". Thus, DOI Theory will examine bike E-hailing behavior intention. Provide input for transportation management to provide new modes of E-hilling such bike E-hilling. Where this transportation management in Malaysia needed to fit their transportation system with the current era to reach customers. Which the growth of digital has made people adept with online matters. Thus, the transportation management in Malaysia needed to have an online transportation system such as bike E-hilling or any E-hilling transportation companies to reach customers and needed to look at customer safety. For example, users of ride-hailing apps seek reassurance that their personal information will be safe. Using ride-sharing services has always been met with skepticism from customers, who worry about their own personal safety, the protection of their belongings, and their insurance coverage, as reported by, which "was also undertaken by Teo *et al.*, [15]". If e-hailing services want to gain their consumers' confidence, they'll need to find a solution to this issue.

Theory that support the relationship of attitude, safety, social limitation, marketing, and price has a positive and significant effect on the behavior intention in using bike E-hailing is Theory of Planned Behaviour. On the other hand, Theory of Planned Behaviour is human behavior in relation to the issue of implementing and adopting information technology; explain and forecast, which "was also undertaken by Jokonya [10]". The TPB expands on the TRA by include elements that might facilitate or impede a person's behavior performance, such as the individual's control beliefs, which "was also undertaken by Ajzen [2]". Beliefs about the expected results of the activity and judgments of these outcomes (behavioral beliefs), beliefs about the normative expectations of others, and a sense of agency all play a role in shaping human behavior, according to the TPB theory, which "was also undertaken by Jokonya,[10]".The theory of planned behavior (TPB) holds that people's actions are always the result of logical, sequential thought processes, which "was also undertaken by Raygor [13]". In light of the shortcomings of the original Theory of Reasoned Action up explaining and predicting human behavior, the new theory seeks to fill in those gaps. Researchers came up with the hypothesis because they believed that conduct intention was not the only predictor of behavior. This is particularly true for actions over which individuals only have limited control due to external factors. The following image illustrates the outline of the model, which includes the three factors that, according to the theory, may be used to anticipate a person's behavior, which "was also undertaken by Ambak *et al.*, [3]". Hence, Theory of Planned Behaviour will application in this research to investigate factor that influences on behavior intention in using bike E-hailing.

Theory that support the relationship of attitude, safety, social limitation, marketing, and price has a positive and significant effect on the behavior intention in using bike E-hailing is Diffusion of Innovation (DOI) Theory. On the other hand, the concept of this diffusion of Innovation (DOI) Theory describes how an idea or a product gradually develops popularity and spreads over a population or a society. When an idea, behavior, or product is widely disseminated, the members of a given social system eventually come to accept and embrace it. One definition of "adopt" is "to change to something other than what one previously had" (i.e., purchase or use a new product, acquire and perform a new behavior, etc.). The key to getting people to try anything new is making them think it's novel or different in some way. In this way, the ability to disperse is realized, which "was also undertaken by Desta [6]". Therefore, in order to successfully enter and conquer the current conventional taxi business, e-marketing in ride hailing requires acceptance and persuasion via its innovation. Hence, diffusion of Innovation (DOI) Theory will apply in this research to investigate factors that influence behavior intention in using bike E-hailing.

Findings on the relationship between attitude and behavior intention. Attitude has a positive and significant effect on the behavior intention. This claimed can also be supported by similar research done by ABD Rahim *et al.*, [1]", with the purpose of study to find out what makes people more or less likely to use an E-hailing service for bikes. The sample that was involved in that research was 377 participants from the Section 13 campus of a Polytechnic or MSU in Shah Alam, Selangor. The finding of that research is that consumers prioritized security while considering their E-hailing habit since it was the most influential factor. Findings on the relationship between safety and behavior intention. Safety has a positive and significant effect on the behavior intention. This claimed can also be supported by similar research done by ABD Rahim *et al.*, [1]", with the purpose of study to find out what makes people more or less likely to use an E-hailing service for bikes. The sample that was involved in that research was 377 participants from the Section 13 campus of a Polytechnic or MSU in Shah Alam, Selangor. The finding of that research is that consumers prioritized security while considering their E-hailing habit since it was the most influential factor. Besides that, findings on the relationship between safety and behavior intention. Safety has a positive and significant effect on the behavior intention. This claimed can also be supported by similar research done by Yunoh *et al.*, [18]", with the purpose of study to fill in the blanks by digging into why and how college students on the East Coast of Malaysia are turning to E-hailing as their primary mode of public transit. The sample that was involved in that research was 379 college-aged individuals here. Responses are being collected from students at three different universities in Malaysia: University of Malaysia Kelantan (UMK), University of Malaysia Pahang (UMP), and University of Malaysia Terengganu (UMT). The finding of that research concluded that college students' interest in using E-hailing services is influenced by factors such as cost, security, and advertising.

Findings on the relationship between social limitation and behavior intention. Social limitation has a positive and significant effect on the behavior intention. This claimed can also be supported by similar research done by ABD Rahim *et al.*, [1]", with the purpose of study to find out what makes people more or less likely to use an E-hailing service for bikes. The sample that was involved in that research was 377 participants from the Section 13 campus of a Polytechnic or MSU in Shah Alam, Selangor. The finding of that research is that consumers prioritized security while considering their E-hailing habit since it was the most influential factor. Findings on the relationship between marketing and behavior intention. Marketing has a positive and significant effect on the behavior intention. This claimed can also be supported by similar research done by Yunoh *et al.*, [18]", with the purpose of study to fill in the blanks by digging into why and how college students on the East Coast of Malaysia are turning to E-hailing as their primary mode of public transit. The sample that was involved in that research was 379 college-aged individuals here. Responses are being collected

from students at three different universities in Malaysia: University of Malaysia Kelantan (UMK), University of Malaysia Pahang (UMP), and University of Malaysia Terengganu (UMT). The finding of that research concluded that college students' interest in using E-hailing services is influenced by factors such as cost, security, and advertising. Besides that, findings on the relationship between marketing and behavior intention. Marketing has a positive and significant effect on the behavior intention. This claim can also be supported by similar research done by Desta,[6]", with the purpose of studying to analyze how Addis Abeba's unique set of circumstances is affected by the many components that make up online marketing and ridesharing. The sample that was involved in that research was 384 E-hailing customers from Addis Ababa. The finding of that research concluded that there was a favorable impact on E-hailing from the variables that were statistically significant. Addis Abeba's E-hailing was most influenced by the city's e-marketing infrastructure, while e-marketing consumers were the second most important aspect. When it comes to the impact they ultimately had on E-hailing, e-marketing service providers ranked third. Suggestions for improving the present internet infrastructure and E-hailing mobile apps are addressed as important recommendations for e-marketing infrastructure suppliers and e-marketing service providers, based on the study results.

Findings on the relationship between price and behavior intention. Price has a positive and significant effect on the behavior intention. This claimed can also be supported by similar research done by Yunoh *et al.*, [18]", with the purpose of study to fill in the blanks by digging into why and how college students on the East Coast of Malaysia are turning to E-hailing as their primary mode of public transit. The sample that was involved in that research was 379 college-aged individuals here. Responses are being collected from students at three different universities in Malaysia: University of Malaysia Kelantan (UMK), University of Malaysia Pahang (UMP), and University of Malaysia Terengganu (UMT). The finding of that research concluded that college students' interest in using E-hailing services is influenced by factors such as cost, security, and advertising. Besides that, findings on the relationship between price and behavior intention. Price has a positive and significant effect on the behavior intention. This claimed can also be supported by similar research done by Ubaidillah *et al.*, [17]," with the purpose of study to explore whether and why millennials want to utilize the Grab E-hailing service. The sample that was involved in that research was 320 teens who participated in the survey. The finding of that research is using a measurement approach, we found that significant variables of Generation Z's propensity to use the Grab E-hailing service include consumer happiness, the influence of social media marketing, pricing, and dependability.

Even though interest in bike hailing has recently increased, the current corpus of study is still dispersed and has a limited scope. The majority of study ignores the deeper qualitative aspects of the behavior intention, social limitation, and safety components of bike hailing in favor of bibliometric indicators including publishing patterns, co-citations, and keyword analysis. Many studies still ignore the implications for future academic and transportation sector advancement in favor of concentrating on the past. These disparities underscore the need for a more thorough and proactive examination of bike hailing in relation to its users. This study is noteworthy because it provides one of the earliest thorough bibliometric mappings of bike hailing, bringing disparate pieces of literature together in an organized summary. It finds top authors, prestigious journals, and significant topic developments in the subject by examining 95 publications from the Scopus database. The results offer useful information for policymakers, academics, and the transportation sector on how to develop bike hailing to enhance the use of bike hailing in the transportation sector. They also draw attention to the wider ways that bike hailing addresses social constraints, behavior intention, safety, and the transformation of the transportation sector. Crucially, this work promotes interdisciplinary cooperation in the areas of safety, social limits, and behavior intention. As such, it provides a useful starting point for further study and application in the field of transportation digital

transformation. The project will cover several themes using bibliometric analysis. Look through research archives and scholarly databases to find out how many papers there are on the subject of bike hailing. Dissect the number of research articles published annually to examine the publication pattern over time. List the titles of reputable scholarly publications that regularly publish articles about bike hailing. To find out which nations publish the most on this subject, look for studies or analysis on the geographic distribution of bike hailing research. Based on their number of publications and citations, determine which writers are the most significant and pertinent to the area of bike hailing. Look for the names of research publications that have had a lot of citations, making a distinction between those that have a lot of local and worldwide citations. Locate the research paper's title that has received the most citations or references. To ascertain the present and changing thematic structure of bike hailing research, examine previous literature reviews and meta-analyses. In order to corroborate the previous findings, this study described the publication patterns on bike hailing using bibliometric analysis of the Scopus database. In addition to the most often referenced works, publishing trends, and authors' keywords, this study examined a variety of publications in terms of accessibility, language, topic matter, and source title. The next procedures will be used to organize the remainder of the document. The methodology for bibliometric analysis will be presented in part (2) and result in part (4) and followed by results and conclusion in parts (4) and respectively.

2. Methodology

The bibliometric toolbox will be used to do the bibliometric analysis. The primary technique and the enrichment technique are the two methods included in the toolbox. Performance analysis (A) and science mapping (B) are the two key components of the approach. Although the primary approaches may be used for a wide range of investigations, this research study will concentrate on a few of them. Two pieces of software, R and VOSViewer, helped with the bibliometric. A quantitative study of a vast collection of data is called bibliometric analysis, and the results are presented as themes, networks, research elements, and descriptive analysis. The evolution and thematic organization of a certain field may be studied with the use of this bibliometric analysis, which "was also undertaken by Badenes-Rocha *et al.*, [21]". Additionally, this study is free of subjective prejudice. This paper's analysis of the bibliographic data "was also undertaken by *Nasir et al.*, [21]." Science mapping and performance analysis were used to derive the trends and research direction. A technique for analyzing the contributions of research participants, including authors, counties, publishers, publications, and institutions in the subject region, is performance analysis. The purpose of science mapping is to create connections among the components of research. As "also undertaken by earlier studies [21-23]," combining scientific mapping and enrichment approaches gives us the conceptual framework of a study area and the fundamental topics of the issue, establishing a connection between different research parts.

2.1 Bibliometric Search

A bibliometric analysis database is gathered from the Scopus database. The Scopus database, which "was also undertaken by *Jakhar et al.*, [20]," is regarded as the most scientific and methodical database for bibliometric analysis. Scopus has been recognized as the best database for bibliometric analysis in addition to the aforementioned claim, which "was also done prior research [21-23]". Therefore, it can be claimed that Scopus is the most extensive database that includes a wide range

of information on articles and that papers must meet strict criteria in order to be included in this database.

Several keywords are recognized for the optimal search, including “E-Hailing”, “Bike Hailing”, and “Asia”. The optimal keyword was “Bike Hailing”. This article will analyze Bike Hailing. A search was performed on the Scopus database using the phrase " Bike Hailing," resulting in the retrieval of 95 papers.

2.2 Filtration

The language publications were not chosen for to having other language publications. The selected papers were then those that were printed in journals. There were 95 final articles chosen for analysis. Since further filtration may lower the number of articles and may affect the bibliometric analysis, no sorting criteria other than these two were used.

3. Results

3.1 Total Publication and Number of Active Years of Publication

One performance analysis approach is the total publication. The overall number of publications on the study topic is taken into account. The 95 gathered findings from the articles released each year are included in the yearly scientific production. The papers were arranged in groups based on the year they were published in the journals. It is possible to conclude from Figure (1) that Bike Hailing research is growing annually. There was just one publication in 2018; nevertheless, by 2022, there were 18 publications overall, and in 2024 and 2025, there were 21 and 19, respectively. 19 papers are counted until October 2025. The phrase "active years of publishing" refers to the number of years that research has been done in the field to examine the phenomena. Groundbreaking research is still being conducted, and the active year began in 2018. Given the pattern shown in Figures (1) and (2), there are still comparatively fewer studies conducted annually; as a result, there is need for further study on this subject.

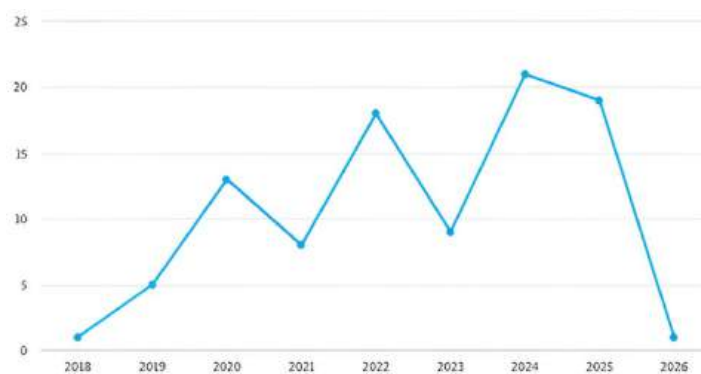


Fig. 1. Year-to-year publications from 2018 to 2026

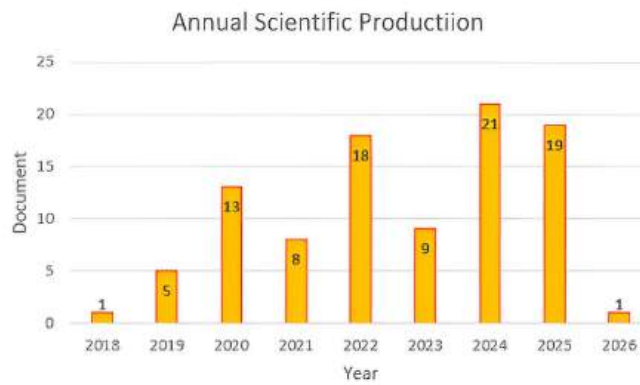


Fig. 2. Year-to-year publications from 2018 to 2026

3.2. Most Promising Journals

The journals that publish the most articles on a certain subject are considered promising. R software was used to identify promising journals based on Bradford's law. Table (1), which lists the top 10 promising journals in the subject of Bike Hailing, shows the most promising journals. With a total of 5 articles in the topic of Bike Hailing, the Transport Geography and Travel Behaviour and Society have an advantage over other journals. With a total of 4 articles in the field of Bike Hailing, the journal Transportation, Transportation Research Part A Policy and Practice, and Transportation Research Record has an advantage over other journals. With a total of 3 publications in the subject of Bike Hailing, the Lecture Notes in Electrical Engineering and Transportation Research Part D Transport and Environment have an advantage over other journals. Others journals have and advantages over other journals that shows in in Table (1). Bradford's law was chosen for examination in publications that showed promise. A graph displaying the source name and the quantity of papers published by a journal achieved the result. This can be seen in Table (1), the graph was later shaped into a table. By identifying the most pertinent journals that are leading the way in publishing content about Bike Hailing, Bradford's law analysis will help researchers swiftly find and choose a few journals that will support their study of Bike Hailing and future research. A journal's potential to impact future scholars in a certain topic increase with the number of papers it publishes in that field.

Table 1

The name of the journal along with the number of a paper published

No.	Name of journals	No. of published
1.	Journal of Transport Geography	5
2.	Travel Behaviour and Society	5
3.	Transportation	4
4.	Transportation Research Part A Policy and Practice	4
5.	Transportation Research Record	4
6.	Lecture Notes in Electrical Engineering	3
7.	Transportation Research Part D Transport and Environment	3
8.	IEEE Transactions on Intelligent Transportation Systems	2
9.	International Journal of Sustainable Transportation	2
10.	Sustainability Switzerland	2

3.3 Dominant Countries

In the field of research, the nations with the highest number of published papers and citations are regarded as dominating nations. The database is examined using R software for the analytical task. The results are interpreted using the scientific production and citations of the countries in order to identify the leading nations in the field of Bike Hailing. Both the quantity of papers and the number of citations is used to determine which nations are dominant. The top ten nations are chosen to be examined from both angles. Finding the top nation by looking at figures (2) and (3) shows that, while Denmark has the greatest average article citations (145.00), the China leads all other nations in terms of documents (37). With not list in top 10 number of documents, the Switzerland ranks second in terms of average document citations, which is a surprise element. Even though these nations had more published documents, United States lagged behind several others in terms of citations, including Canada, United Kingdom, Greece, and others. Australia is in a similar situation. Compared to its Denmark equivalent, this country earned more citations with not list in top 10 total document. Information from figures (3) and (4) was transformed into a tabular format in Table (2) to facilitate the interpretation of the analysis. Thus, it can be said that Denmark and the China are at the forefront of Bike Hailing research. In terms of average article citations, the Denmark, Switzerland, Canada, and United Kingdom are notable nations.

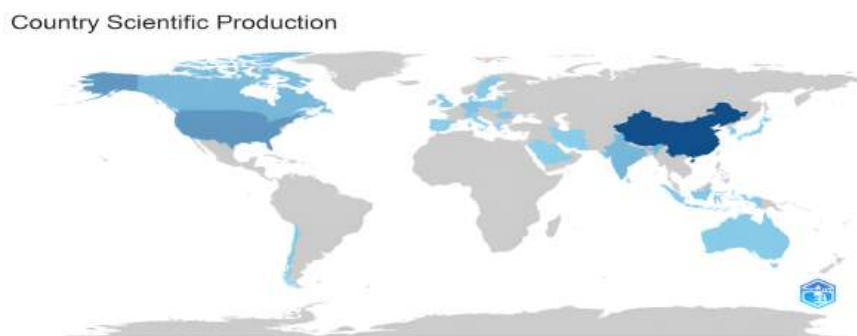


Fig. 3. A world map depicting the number of documents published by each country

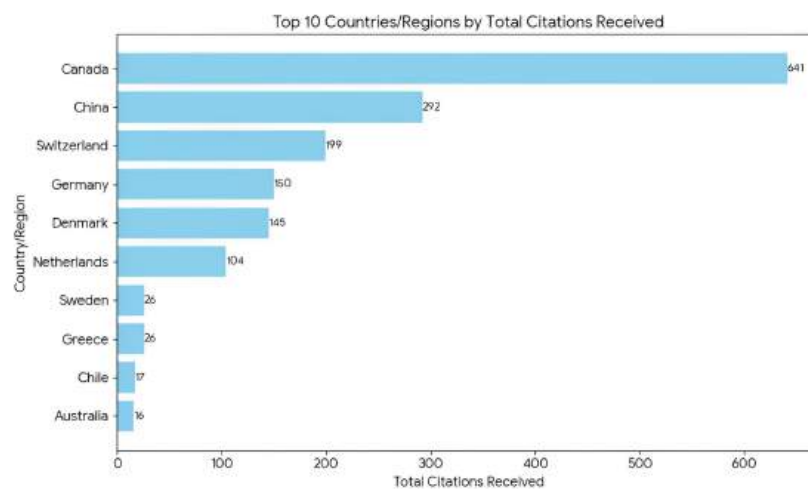


Fig. 4. The number of citations received by each country's documents

Table 2

The countries' names, the number of documents published and the number of citations received

Rank	Country	Document	Rank	Country	Average Article Citations
1	China	37	1	Denmark	145.00
2	United States	23	2	Switzerland	99.50
3	Canada	11	3	Canada	58.27
4	Germany	7	4	United Kingdom	37.67
5	India	6	5	Greece	26.00
6	United Kingdom	6	6	Germany	21.43
7	Netherlands	5	7	Netherlands	20.80
8	Hong Kong	4	8	Portugal	15.00
9	Japan	3	9	Sweden	13.00
10	Australia	3	10	United States	10.96

3.4 Most Relevant Authors

The quantity of papers each author publishes determines which writers are the most pertinent. R software therefore calculated it by counting the number of Bike Hailing in Malaysia related publications they had written. According to the data, an author's significance increases with the number of papers they have written. The ten most pertinent writers are displayed in Figure (5). It is evident that Gao, Fan until Zhang, Xiaoyu have 3 papers each, Antoniou, Constantinos until Han, Chunyang have 2 papers each. The top ten writers cited can help readers understand their work and what more needs to be done.

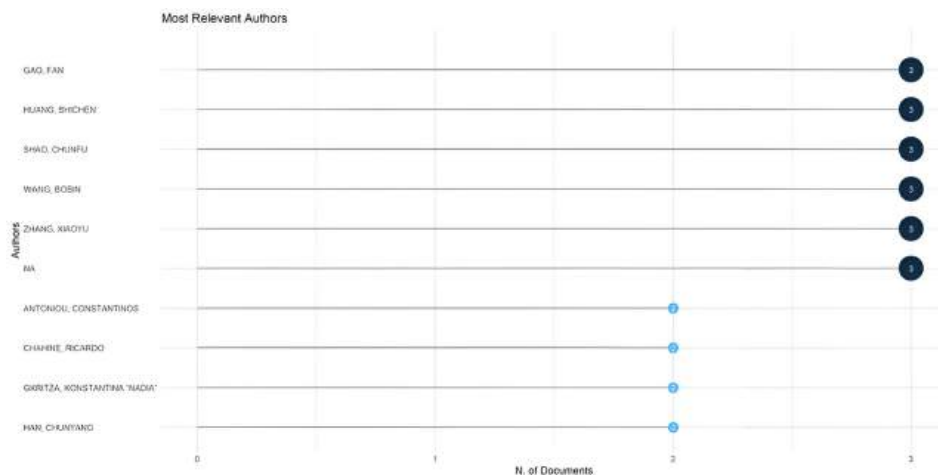


Fig. 5. The authors' names and the number of papers published by them

3.5 Influential Authors

The most influential authors are the ones who have received the highest number of documents in their field. It is solely based on the citations. Therefore, influential authors were determined by the total document count an author receives. Authors with the highest total document in their account will be the most influential, and authors with fewer citations will be less influential. Authors such as Gao Fan until Zhang Xiaoyu with 3 document each, are clearly leading the chart. But authors such as

Chahine Ricardo and Li Zhitao are in 2nd position respectively. The rest of the authors are shown in figure (6).

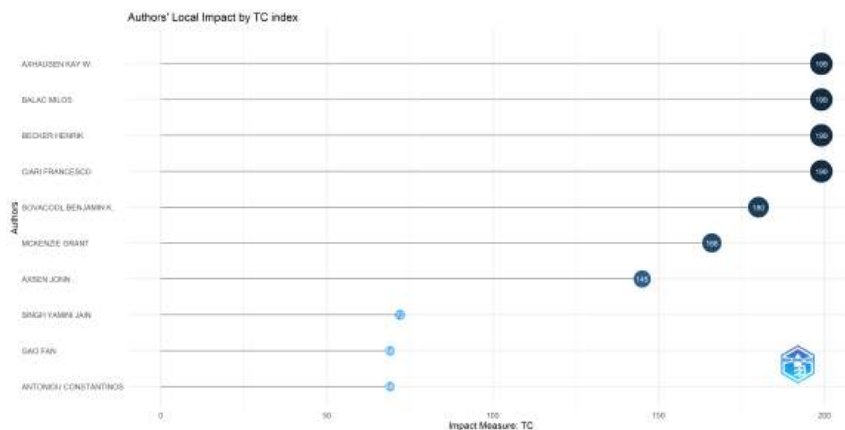


Fig. 6. Authors' names and numbers of total document

3.6 Citation Analysis

Citation analysis is a scientific mapping approach. When a publication is referenced by another publication, it links the publication. This “was also done by Jakhar *et al.*, [20]”. Two criteria are used for citation analysis: (1) global citation and (2) local citation. The quantity of citations an article obtains from readers may be used to gauge its impact in citation analysis.

3.6.1 Most global cited documents

The publications with the most citations without any filtering, such as topic domain, are referred to as the most internationally cited texts. This research “was also done by Jakhar *et al.*, [20]”. To put it another way, global citations are those that a publication receives regardless of whether it has been cited inside or outside of its topic domain. The ten most frequently cited papers worldwide might also be seen as having a significant impact on other writers' decision to include citations in their works. Both articles that discuss Bike Hailing and those that do not discuss it make reference to these materials. Figure (7) displays the ten most influential papers, and table (3) analyzes them. The top ten most internationally cited publications that were examined from Figure (7) are included in Table (3) along with their article names, authors, and citation counts.

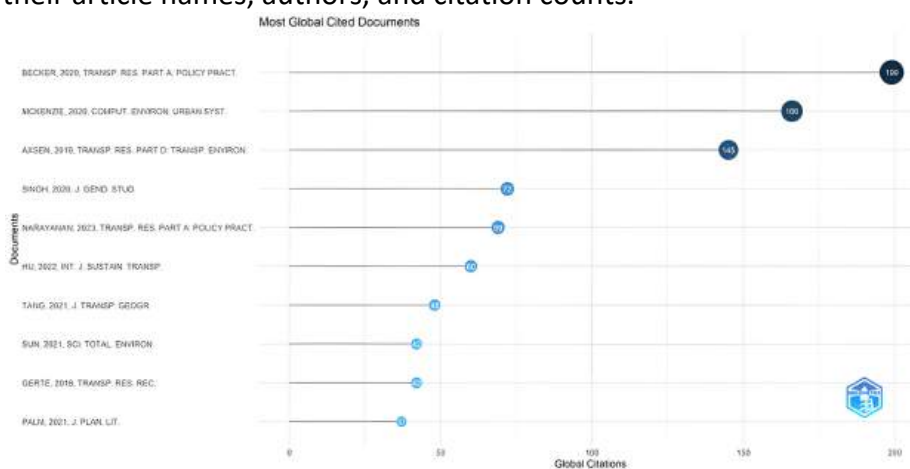


Fig. 7. The most influential papers in terms of global citation

Table 3

The article name, authors' name, and citations of the top 10 globally cited documents

No.	Article Title	Authors	Global citation
1.	Assessing the welfare impacts of Shared Mobility and Mobility as a Service (MaaS)	Becker, 2020, Transp. Res. Part A: Policy Pract.	199
2.	Urban mobility in the sharing economy: A spatiotemporal comparison of shared mobility services	Mckenzie, 2020, Comput. Environ. Urban Syst.	166
3.	The roles of users in electric, shared and automated mobility transitions	Axsen, 2019, Transp. Res. Part D: Transp. Environ.	145
4.	Is smart mobility also gender-smart?	Singh, 2020, J. Gend. Stud.	72
5.	Shared mobility services towards Mobility as a Service (MaaS): What, who and when?	Narayanan, 2023, Transp. Res. Part A: Policy Pract.	69
6.	A systematic review on shared mobility in China	Hu, 2022, Int. J. Sustain. Transp.	60
7.	Uncovering the spatially heterogeneous effects of shared mobility on public transit and taxi	Tang, 2021, J. Transp. Geogr.	48
8.	Environmental impact of mutualized mobility: Evidence from a life cycle perspective	Sun, 2021, Sci. Total. Environ.	42
9.	Is there a limit to adoption of dynamic ridesharing systems? Evidence from analysis of Uber demand data from New York City	Gerte, 2018, Transp. Res. Rec.	42
10.	Equity analysis and new mobility technologies: toward meaningful interventions	Palm, 2021, J. Plan. Lit.	37

3.6.2 Most local cited documents

Publications that are mentioned inside the topic domain are known as local cited documents; for example, an article that "was also undertaken by *Jakhar et al.*, [20]" obtains citations from another article in the same subject area. To put it another way, local citations are those that are specific to the field in which the materials are found. As an illustration, a paper about Bike Hailing is referenced in another work about Bike Hailing. As a result, the majority of locally cited papers examine works that are often referenced or mentioned in the field. One can rely on the papers displayed in figure (8) to gain understanding about the topic matter. These materials are particularly pertinent to the subject of Bike Hailing and can be considered trustworthy sources for obtaining first papers. It should be highlighted that, for the clear reasons stated in their definition, local citations are always lower than global citations. The analysis of Figure (8) is completed in Table

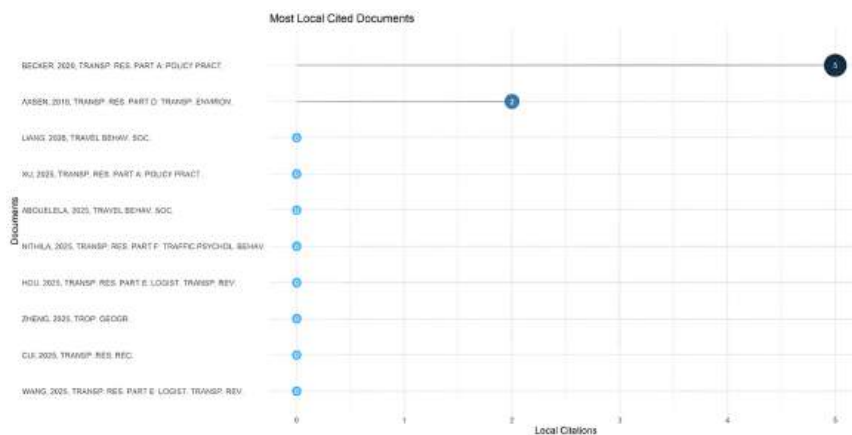


Fig. 8. Documents receiving a total number of local citations

Table 4

Shows the article name, authors' name, and citations of the top 10 locally cited documents

No.	Article Title	Authors	Local Citations
1.	Assessing the welfare impacts of Shared Mobility and Mobility as a Service (MaaS)	Becker, 2020, Transp. Res. Part A: Policy Pract.	5
2.	The roles of users in electric, shared and automated mobility transitions	Axsen, 2019, Transp. Res. Part D: Transp. Environ.	2
3.	Predicting short-term urban bike sharing demand in a coupled continuous and network space	Liang, 2026, Travel Behav. Soc.	0
4.	The synergy impact of private vehicle restrictions and public transportation improvements on commuters: a case study of Chengdu, China	Xu, 2025, Transp. Res. Part A: Policy Pract.	0
5.	Why do passengers use pooled-rides services? Social effects and implications for policy making	Abouelela, 2025, Travel Behav. Soc.	0
6.	Navigating transportation barriers: Older adults' familiarity with new mobility options and perceptions toward autonomous vehicles in Arkansas	Nithila, 2025, Transp. Res. Part F: Traffic Psychol. Behav.	0
7.	Hierarchical graph construction for station-free traffic demand prediction	Hou, 2025, Transp. Res. Part E: Logist. Transp. Rev.	0
8.	Shared bicycle travel mode in Shenzhen from the perspective of multi-dimensional space-time interaction.	Zheng, 2025, Trop. Geogr.	0
9.	How does Bike Absence Influence Mode Shifts Among Dockless Bike-Sharing Users? Evidence From Nanjing, China	Cui, 2025, Transp. Res. Rec.	0
10.	Multi-modal travel route planning considering environmental preference under uncertainties: A distributionally robust optimization approach	Wang, 2025, Transp. Res. Part E: Logist. Transp. Rev.	0

3.7 Co-citation Analysis

One method of scientific mapping is co-citation analysis. When two references are mentioned together in a third work, it is assumed that they are related in some way or share a similar content structure. Co-citation analysis, which "was also undertaken by Jakhar *et al.*, [20]," is used to expose the conceptual framework of a particular field of research. Based on the clusters created, this approach also assists us in identifying the most important publications. Each cluster has a theme and is based on a certain foundation. After grouping the documents into clusters, the co-citation analysis identifies the publications that are most related to each subject. Researchers can learn more about the article based on their interests thanks to this analysis. Additionally, future scholars might gather literature on a specific topic by consulting the related publications. The VOSViewer program employs a co-citation approach for the analysis. Only publications that have at least five citations in published articles are chosen. Just 8 out of 274 reach the citation limit. Figure (9) was examined by assigning weight to the links.



Fig. 9. A map of co-citation analysis based on the authors' name

One cluster are created in total. By giving the connections more weight, you may show how many additional papers are related to the papers in the reference list. A paper is better suitable for study if it has a greater number of connections.

Table 5

Shows the interpretation of the co-citation map

Colour of cluster	Author name	Citation
Red	Alonso-gonzalez	8

This bar chart, titled "Document by author," in Figure (10) illustrates the number of documents published by a selection of authors. The y-axis represents the number of documents, while the x-axis lists the authors. The two authors with the highest rankings, Zhang, X. and Wang, B., have each written four documents. Eight authors Gao, F., Li, Z., Zhu, M., Wang, X., Huang, S., Shao, C., Huang, G., and Zhao, J. that have each published three papers come behind them. Between the authors listed, the number of published documents varies from a minimum of three to a maximum of four.

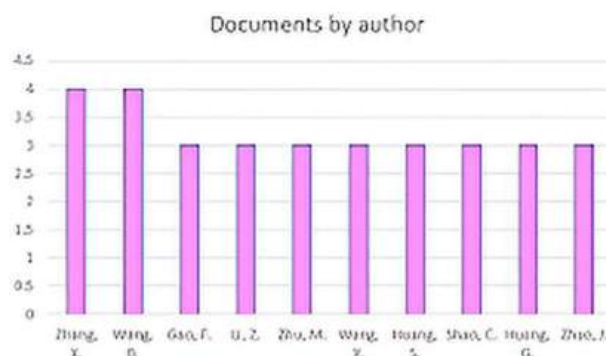


Fig. 10. Highest document from authors' name

This Table 6, shows the author pair of the collaborations," lists the top 10 author pairs based on the number of collaborations they've had. The table has three columns: No. (ranking), Author Pair, and Collaborations (the number of joint publications). Zhang, X., Wang, B., Shao, C., and Huang, S. The top six partnerships include these four authors, who collaborate exactly three times in each potential pairing. This indicates that each pair of these four authors has the highest number of partnerships recorded, forming a highly interacting research cluster. The second tier of co-authorship

frequency in this dataset is formed by the somewhat lower frequency of two collaborations each for the other four pairs Gao, F. & Li, Z.; Li, X. & Shen, L.; Gao, F. & Tang, J.; and Gao, F. & Han, C.

Table 6

The author pair of the collaborations

No.	Author Pair	Collaborations
1.	Huang, S. & Shao, C.	3
2.	Shao, C. & Wang, B.	3
3.	Huang, S. & Wang, B.	3
4.	Huang, S. & Zhang, X.	3
5.	Wang, B. & Zhang, X.	3
6.	Shao, C. & Zhang, X.	3
7.	Gao, F. & Li, Z.	2
8.	Li, X. & Shen, L.	2
9.	Gao, F. & Tang, J.	2
10.	Gao, F. & Han, C.	2

3.8 Co-occurrence Analysis

A further science mapping method that uses "author keywords" is co-occurrence analysis. Considering the study aims to concentrate on the author's preferred method of conducting research, it contains terms that the author has utilized as keywords. Co-word analysis, which "was also undertaken by Jakhar *et al.*, [20]," creates themes or groups based on words that occur together. Because just those keywords are desired, just the ones that appear in at least five articles are utilized for the purpose of analysis.

Keywords are frequently used by several writers to assess how a field of study is operating, and only powerful words may be examined. The point where the limit is reached by 337 characters. Two groups were formed by co-occurrence analysis using Figure (11) and Table (7). A keyword's effect increases with the size of the circle; Ride-hailing and Shared mobility were mentioned 19 and 17 times, respectively. The keywords Ride-hailing and Bike-sharing appeared 19 and 10 times, respectively, and the Mobility as a service (maas) appeared 5 times in a cluster (1) of red highlight words. The terms " Shared mobility " (17) and " Covid-19 " (8) are included in cluster (2) of green.



Fig. 11. A map of the co-occurrence of keywords

Table 7

Various keywords formulated through co-occurrence analysis

Colour of cluster	Keywords	Link	Total link strength	Times appeared
Red	Ride-hailing	3	14	19
	Bike-sharing	3	12	10
	Mobility as a service (maas)	3	5	5
Green	Shared mobility	4	12	17
	Covid-19	1	3	8

3.8.1 Thematic analysis

The co-occurrence analysis was used to create thematic clusters, as seen in Figure (12). This "was also studied by Jakhar *et al.*, [20]" Co-occurrence analysis is a science mapping approach concentrating around terms to develop clusters of different themes by categorizing keywords the fact that come together regularly. Every term was chosen in order to recognize the various themes that emerged. The reason is due to the simple reason that all keywords provide a more accurate image for theme creation, which considers the words used in the abstract, title, or keywords. Because the coverage of all keywords is greater than that of the author's keyword, phrases that featured in publications at least ten times were chosen for the thematic analysis. Phrases that appeared in documents more frequently were also considered. Although a keyword develops of greater significance in a specific area if it appears a minimum of 5 times in various papers, we need to assign it a weight of at least ten times before it appears in papers. Second, a hit-and-trial approach was used with varying weights; findings were easy to understand when the weight was ten times. A total of 35 words satisfied the minimum requirement, which assigned weight to keyword occurrences. 4 clusters in all were created. Theme 1 talks about the red cluster of Planning, Behavior, and Context. Terms like China, travel habits, and method of transportation serve as the red cluster's anchors. This theme reflects contextual and fundamental research, frequently with a regional emphasis. In a particular, high-density context like China, methodological approaches to comprehending why and how people travel are highly valued. Key themes include transportation planning, spatial-temporal analysis, and decision-making. This cluster is linked to urban policy and infrastructure considerations through the crucial role of bicycle transportation and traffic concession. Theme 2 aims to green cluster centres on themes like emerging and shared mobility. The green cluster focuses on electric vehicles, ride-hailing, and mobility as a service (MaaS). The more recent, technologically advanced facets of urban transportation are embodied by this theme. Urban mobility, travel demand, and general mobility are among the fundamental ideas. The integration of these new services with current modes of transportation is demonstrated by terms such as carsharing, motor transportation, and the overall idea of cycling, underscoring study on how technology is altering accessibility and personal mobility patterns. Theme 3 is all about the blue cluster focuses on shared and policy-relevant travel. Bike sharing, shared mobility, and variables influencing mode choice are the main topics of the blue cluster. Research into the ways that shared transport systems were impacted by and responded to the pandemic is suggested by the tight connection between this domain and external, large-scale variables like COVID-19. The United States' inclusion suggests that part of this study has a regional focus. Important ideas like travel time and public transportation demonstrate a concern for the effectiveness and viewpoint of these shared options. Theme 4 is all the yellow cluster relates to traditional and policy-driven urban transit. The traditional modes of urban transportation and the related planning and policy requirements are primarily covered by the yellow cluster. It contains terms like mass transit, public transportation, transportation policy, and the basic ideas behind

bicycles and taxis. A forward-looking, planning-oriented study focus is suggested by the inclusion of forecasting, which aims to manage and develop the city's current transport infrastructure in order to fulfill future demand for public transportation and enhance urban mobility in general.

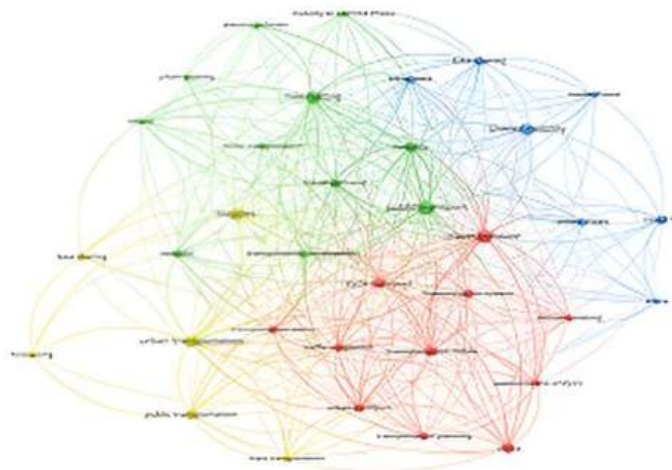


Fig. 12. A map of co-occurrence analysis to form themes through all keywords

3.9 Thematic Evolution

Thematic evolution is used to determine the direction of the trend, through offering a thorough bibliometric analysis of Bike Hailing research, which methodically maps the field's intellectual structure, publishing patterns, and thematic evolution, the current study has significant advantages for both academia and practice. Finding reputable sources, identifying research gaps, and forming partnerships with seasoned professionals are all made easier for researchers and practitioners by the identification of powerful nations, significant writers, and high-impact publications. Time is broken down into groups in theme progression in order to examine changes across time. Based on the Figure (13), analysis of publication trends and key research topics, the thematic evolution of Bike Hailing has progressed through distinct phases. The fundamental subjects of public transportation, travel behavior, and urban transportation dominated the conversation in the initial years about 2013–2016. Understanding commuter preferences, the effects of conventional forms of transportation, and fundamental urban planning ideas were the main areas of research during this time. Although ride-hailing first appeared, it was not very common, suggesting that it was a new but unimportant topic. In the middle of the time about 2017–2021, the thematic focus started to change considerably. The rapid expansion of shared micromobility during this era is evidenced by the sudden and persistent increase in the usage of phrases like "bike sharing" and "dockless bike-sharing." These terms swiftly rose to the top of the search results, indicating a significant shift in scholarly focus toward the operational, policy, and behavioral elements of these systems. Research on ride-hailing also accelerated at the same time, becoming a crucial research pillar alongside bike sharing as both modalities transformed urban transport. While the fundamental concepts of bike sharing and public transportation are still very important, the research seems to be coming together in the last few years about 2022–2025. The consistent use of terms like travel behavior and urban transport suggests that the emphasis is shifting from merely describing these services to a deeper comprehension of how they integrate with current transit systems, what impact they have on sustainability, and how they fit into the larger scheme of urban mobility. Thus, the evolution shows how broad transportation

studies gave way to highly specialized shared mobility research, which in turn led to an emphasis on the systemic integration and effects of these new modes.

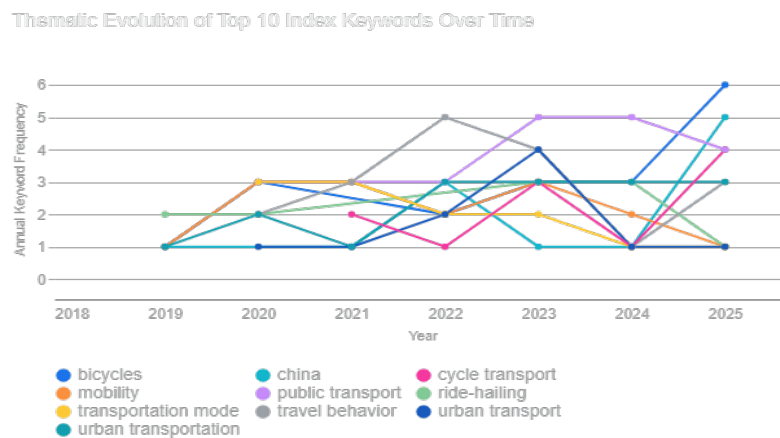


Fig. 13. Showcases thematic evolution

3.10. Discussion

This numerous bibliometric analysis of Bike Hailing adds to both academic discussion and real-world implementation. Scholarly knowledge of the topic is greatly improved by the study's compilation and mapping of earlier studies. By highlighting important areas and resources, the study gives researchers a crucial framework. The examination of yearly scientific output shows that research on bike hailing is expanding, but the relatively small number of studies carried out each year suggests that further research is necessary. The study assists researchers in quickly locating and choosing appropriate publication channels by highlighting the most promising publications, such as the Journal of Transport Geography and Travel Behavior and Society (both with five papers). Additionally, by using global and local citation analysis to identify the most significant articles and the most relevant authors (such as Gao, Fan, and Zhang, Xiaoyu, each having three publications), scholars can gain an understanding of the foundational works and top authorities in the subject. By organizing linked publications into clusters, the co-citation analysis helps reveal the conceptual structure of the study and helps future researchers compile material on a particular subject according to their interests. The report offers data-driven insights for strategic decision-making to practitioners and policymakers. Finding trustworthy sources and establishing global alliances with seasoned professionals are made easier by identifying the top nations, noticing that China leads in document count (37) and Denmark lead in average article citations (145.00). Thematic analysis offers a clear framework for research themes. For instance, it identifies a "yellow cluster" that pertains to traditional and policy-driven urban transit such as mass transit, public transportation, and forecasting and a "red cluster" that reflects contextual and fundamental research frequently with a regional emphasis such as China and travel habits. A greater comprehension of the ways in which services interact with existing transit systems and their effects on sustainability is made possible by this thematic clarity. In order for practitioners to locate reliable sources and spot research gaps that might be pertinent to their work, the field's general systematic mapping is essential.

4. Conclusions

To enable readers to better comprehend the field of Bike Hailing, the paper's main objective was to perform a bibliometric study of the data gathered. The study's path, theme development and

evolution, network analysis, and Bike Hailing patterns were the main topics of the current study. Relevant data was gathered with the use of the bibliometric analysis about the bike Hailing and to uncover the topic's various ride-hailing, shared mobility, bike-sharing and more. The top contributors to this study are clustered geographically, with Denmark leading in the average number of article citations (145.00) and China leading in the number of published papers (37). With five papers each in the field, the *Journal of Transport Geography and Travel Behavior and Society* are the most prestigious publications according to Bradford's law. Furthermore, with three papers apiece, important researchers Gao, Fan, and Zhang, Xiaoyu stand out. For future researchers searching for reliable sources and possible partners, the identification of these top countries, publications, and authors offers an essential context. A rising field of study with well-established main drivers and changing thematic focuses is revealed by the bibliometric analysis of bike e-hailing research. 95 papers have been retrieved from the Scopus database overall, with 2024 and 2025 seeing the highest yearly scientific output with 21 and 19 publications up to October, respectively. Two important theories—the Theory of Planned Behavior (TPB) and the Diffusion of Innovation (DOI) Theory—support this growing body of evidence by arguing that a number of factors have a positive and significant impact on the behavioral intention to use bike e-hailing. These crucial elements include price, marketing, social constraints, safety, and attitude. Because consumers are concerned about their physical safety, the security of their personal information, insurance coverage, and the protection of their possessions, safety is a particularly powerful consideration. The field's conceptual development is demonstrated by the theme analysis. The first studies (2013–2016) concentrated on urban and public transportation. A notable movement toward shared micromobility occurred during the mid-phase (2017–2021), with a notable increase in the emphasis on bike sharing and the increasing significance of ride-hailing. A focus on the systemic integration of these new services, their impact on sustainability, and their place in the broader context of urban mobility and travel behavior is suggested by the most recent phase (2022–2025). This thorough mapping of the research ecosystem gives scholars and decision-makers data-driven insights to pinpoint research gaps and guide strategic transportation management choices.

The current study has limitations. This study's findings were not generalizable to other situations, primarily because it only looked at papers that were included in the Scopus database. Thus, employing larger databases, like Web of Science or Google Scholar, may yield fascinating insights for future research. This restriction limits the range of perspectives and can leave out significant contributions to the Bike Hailing field that were not included in Scopus. Future studies might therefore broaden the bibliometric mapping by integrating many databases, enabling more comprehensive coverage, improved cross-validation of results, and more cross-disciplinary generalizability. Quantitative bibliometric variables including publishing trends, co-occurrence, co-citation, and topic progression were the main focus of this study. Deeper qualitative facets of customer experiences and management techniques are not captured by these approaches, despite the fact that they offer insightful information about structural patterns. To provide deeper theoretical and practical insights, future research can use a mixed-method approach, employing more language and integrating bibliometric mapping with content analysis or systematic literature reviews. Customers have always viewed ride-sharing services with suspicion. The main concerns of customers are insurance coverage, personal safety, and the security of their possessions. Because of its importance, safety has been found to be a powerful incentive influencing passenger intention. More precisely, issues have been brought up about the security of travelers, especially ladies. Additionally, users of ride-hailing applications want for assurances that their personal information will be secure in the digital world. In order to win over customers, e-hailing firms must address these pervasive safety and security concerns. Thus, future research should extend the bibliometric horizon

by incorporating foresight analysis, trend forecasting, and scenario planning to anticipate emerging research avenues and practical challenges in the Bike Hailing ecosystem.

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