International Journal of Innovation and Industrial Revolution
EISSN: 2637-0972
IJIREV
Volume 8 Issue 25 (June 2026) PP. 321-338

INTERNATIONAL JOURNAL OF INNOVATION AND INDUSTRIAL REVOLUTION (IJIREV)
www.gaexcellence.com/ijirev

TRENDS AND RESEARCH CROWD LOGISTIC A BIBLIOMETRIC ANALYSIS

Thiban Krishnamoorthi[1], Norhidayah Azman[2]*, Sena Atmaja[3], Mizan Asnawi[4]

[1] Post Graduate Centre, Management and Science University
thibankrishnamoorthi@gmail.com https://orcid.org/ 0009-0009-7173-673X
[2]Faculty of Business Management and Professional Studies, Management and Science University, Malaysia
norhidayah_azman@msu.edu.my https://orcid.org/0000-0001-8324-7137
[3]Program Studi Manajemen, Universitas Muhammadiyah A.R. Fachruddin
senaatmaja@unimar.ac.id https://orcid.org/0009-0000-1631-5048
[4]Fakultas Ekonomi dan Bisnis, Universitas Muhammadiyah Riau, Jl.Tuanku Tambusai
mizan.asnawi@umari.ac.id https://orcid.org/0009-0008-2504-9480
*Corresponding Author

Article Info:

Article history:
Received date: 04.05.2026
Revised date: 24.05.2026
Accepted date: 10.06.2026
Published date: 24.06.2026

To cite this document:

Krishnamoorthi, T., Azman, N., Atmaja, S., & Asnawi, M. (2026). Trends And Research Crowd Logistic a Bibliometric Analysis. *International Journal of Innovation and Industrial Revolution, 8*(25), 321-338.

Abstract:

Occupancy of passenger cars has been declining for years. Partially empty automobiles reduce the viability of passenger mobility on our roads while simultaneously offering a freight transportation opportunity. Crowd logistics makes advantage of the extra passenger capacity on current routes to conduct delivery operations, which benefits the environment, society, and economics. This investigation report may offer readers with extra information on the subject. The study covers a thorough evaluation of 604 articles gathered between 1988 and 2025. This article will examine the conclusions of notable writers, publications, countries/regions, and disciplines of research. This essay also sought to identify several themes that emerged and evolved throughout the active years using co-citation and co-occurrence networks. In light of the increasing amount of research publications and the broad adoption of Crowd logistics in many countries, bibliometric analysis is required to give a complete collection of statistics that may assist investigators in locating the most significant studies to time. These may be accomplished by using the VOS Viewer and Biblioshiny tools to investigate various aspects of the Crowd Logistics research area and identify prospective future study areas.

International Journal of Innovation and Industrial Revolution
IJIREV
EISSN: 2637-0972
Volume 8 Issue 25 (June 2026) PP. 321-338

DOI: 10.35631/IJIREV.825020 **Keyword:**

Bibliometric Analysis, Crowd Logistics, Logistics, Transportation, And Vosviewer

Introduction

Passenger vehicle occupancy has been dropping for years. On our roadways, partially empty cars provide a freight transportation opportunity while also decreasing the feasibility of passenger mobility. Crowd logistics (CL) uses the excess capacity of passengers on existing routes to carry out delivery activities, which has positive effects on the economy, society, and environment. Crowd logistics (CL) is a promising idea that encourages people to utilize their additional carrying capacity in cars, motorcycles, buses, and airplanes to convey things for others. It is also referred to as crowd shipping, crowdsourced delivery, cargo hitchhiking, or collaborative logistics. Co-transporting packages and passengers together on a journey to deliver them is known as crowd logistics. Five stakeholders are impacted by the social, environmental, and economic negative effects that crowd logistics are causing. Impact analysis and stakeholder analysis utilizing multi-actor multi-criteria analysis to determine external transportation costs are the methods employed in this study. Delivery services are contracted out to independent crowd service providers under the crowd logistics paradigm. It has been discovered that crowdsourcing may have financial advantages. Additionally, it could provide last-mile delivery operational flexibility. In addition, cabs were used to return things as part of the crowdsourcing approach for internet commerce (Howe et al., 2006, Buldeo et al., 2017, Rai et al., 2018,).

The demand for efficient and socially conscious transportation options has grown as a result of the quick expansion of e-commerce and the growing urban population. A key element of the economic growth of the city is urban mobility. Urban mobility affects the quality of life in cities while also advancing their social and economic goals. The local economy is negatively impacted by the majority of city transit activities. This prompted the introduction of other projects. One cutting-edge business strategy in the sharing economy is crowd logistics. In crowd logistics, drivers work as independent contractors using their own cars, and shippers utilize technological platforms to assign logistical jobs to a huge number of drivers. By offering drivers informative support, crowd logistics systems help optimize the allocation of logistics resources by integrating massive logistical jobs. Crowd logistics has been shown to improve logistics performance in practice (Rześny-Cieplińska et al., 2019, Zhang et al., 2019, Howe et al., 2006).

The crowd logistics research remains fragmented and overly focused on bibliometric measures, neglecting qualitative dimensions crucial for future progress. This study provides a comprehensive bibliometric mapping by analyzing 604 articles from the Scopus database,

International Journal of Innovation and Industrial Revolution
IJIREV
EISSN: 2637-0972
Volume 8 Issue 25 (June 2026) PP. 321-338
identifying key authors, journals, and developments. It offers vital insights for policymakers and industries, highlighting how crowd logistics affect transportation and urging multidisciplinary collaboration. The project includes analyzing publication trends, regional distributions, and citation metrics to guide future research and implementation.

Literature Review

The sharing economy shows significant cost reductions via crowd logistics (CL), enhancing efficiency, flexibility, and customer experience. Businesses benefit from low infrastructure needs and flexible labor. However, while CL reduces emissions, it may also increase traffic and accidents, impacting delivery costs and quality. (Buldeo et al., 2017, Rai et al., 2018). Researchers have explored dynamic pricing for perishable products, particularly in crowd logistics. Direct-network effects enhance optimal pricing, while cross-network effects negatively influence it. Both impacts affect supply equilibrium, linking customer demand and service provider supply. (Howe et al., 2006). The global sharing economy, closely tied to crowdsourcing, involves the lending, swapping, and sharing of goods and services, which can be categorized into three types. Firstly, asset recirculation, exemplified by eBay, facilitates trading products online. Secondly, increased product use, represented by services like Zipcar that allow car rentals by the hour, enhances asset utilization. Lastly, asset sharing focuses on pooling resources for production rather than consumption, as seen in longstanding cooperative networks. Environmental issues, including traffic congestion and CO2 emissions from passenger and freight transport, historically received private sector attention. Significant reductions in emissions have arisen from using electric and low-emission vehicles, bikes, and scooters. Sustainable urban logistics systems concentrate on minimizing CO2 emissions, with social aspects highlighting community development. Many analyzed crowd logistics solutions met criteria such as safety and simplicity, enabling users to act as both customers and suppliers within their communities. This article investigates how informational support from crowd logistics platforms impacts logistics performance, through three key methods: logistic resources-demand model, logistic agility, and platform ease of use (PEU). A study in China revealed that an effective informational platform enhances efficiency and lowers costs, underscoring the importance of educational support for drivers. Simplified platform use improves the alignment between support and logistics demands. Consequently, crowd logistics firms should prioritize user experiences and perceived benefits to enhance platform usability and overall effectiveness. (Bortolini et al., 2026, Ali et al., 2025, Cramer et al., 2025, Hashem et al., 2025, Mohri et al., 2025, Behl et al., 2023, Rześny-Cieplińska et al., 2019, Zhang et al., 2019).

Methodology

The bibliometric toolbox, utilizing primary and enrichment techniques, focuses on performance analysis and science mapping. Software R and VOSViewer support analysis of bibliographic data, revealing trends, thematic organization, and research contributions without subjective bias, as evidenced by previous studies. A bibliometric analysis using the Scopus database identified 604 articles on "Crowd logistic." Strict inclusion criteria ensured quality, focusing solely on English journal publications without further filtration.

International Journal of Innovation and Industrial Revolution
IJIREV
EISSN: 2637-0972
Volume 8 Issue 25 (June 2026) PP. 321-338

Findings

Overall publications while relevant time frames for publishing

A method for evaluating performance is the total publication analysis. We consider the total number of articles that address the research question. Every year, scientists publish 604 publications that compile results from those articles. Depending on year of published in the publication, the articles were categorised. If we look at Figure (1), we can see that crowd logistic research is expanding every year. By 2022, there were six publications total; by 2023, there were sixty-six; and by 2024, there were fifty-one. In 1988, there were just two publications. Through October 2025, 54 papers will have been counted. The term "active years of publishing" describes the duration of time that professionals in the area have actively studying the phenomenon. Research that started in 1988 is still going strong; it was groundbreaking even then. Figures (1) and (2) reveal that yearly research is still very low, hence more research is needed in this area.

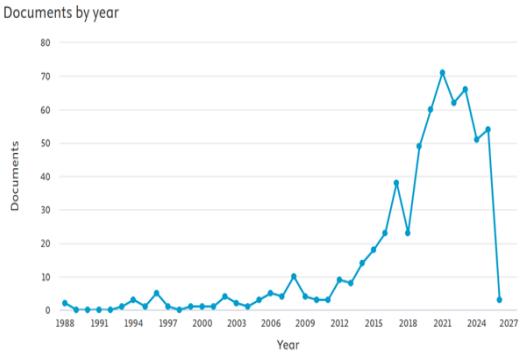

Figure 1: Contains Year-By-Year Producing Throughout 1988 To 2027

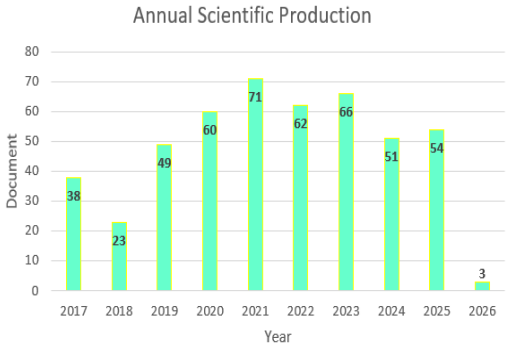

Figure 2: Showing Year-Over-Year Releases From 2017 To 2027

Most Promising Journals

The total number of publications issued on a certain subject is highest in promising journals. Using Bradford's law as a basis, R software was used to discover potential publications. The top journals in the field of crowd logistics are listed in Table 1. Comparatively, no other publication has as many articles on crowd logistics as Transportation Research Part E: Logistics and Transportation Review (14 total). Procedia - Lecture Notes in Computer Science and Transportation has the most articles on crowd logistics, eleven, compared to other journals. Among other publications, Advances in Sustainability (Switzerland) stands out due to its eleven works covering crowd logistics. Some journals provide more benefits than others, as shown in Table (1). Several journals decided to examine Bradford's law. A graph showing a journal's publication count with the name of the source was the end product. Because of this, the graph was transformed into a table, as seen in Table (1). Researchers may use Bradford's law analysis to quickly find and choose journals that support crowd logistics research and future studies. These journals are setting the standard for publishing crowd logistics content, so researchers can rely on them. One measure of a journal's impact on the academic community is the number of papers it issued on any given subject.

International Journal of Innovation and Industrial Revolution
EISSN: 2637-0972 IJIREV
Volume 8 Issue 25 (June 2026) PP. 321-338

Table 1: Represents The Designation of The Publication and The Number of Papers Published

No.	Name Of Journals	No. Of Published
1.	Transportation Research Part E: Logistics And Transportation Review	14
2.	Lecture Notes In Computer Science	11
3.	Transportation Research Procedia	11
4.	Sustainability (Switzerland)	10
5.	Communications In Computer And Information Science	7
6.	Lecture Notes In Networks And Systems	7
7.	Plos One	6
8.	Transportation Research Part B: Methodological	6
9.	Transportation Research Part C: Emerging Technologies	6
10.	International Journal Of Physical Distribution And Logistics Management	5

Dominant Countries

Nations possessing the majority of scholarly articles with citations are assumed to have been dominating throughout the field of research. R program is used to analysed the database. To determine which countries are at the forefront of crowd logistics, the findings are analysed using the countries' research output and citations. The number of publications and citations are utilized to identify the dominating countries. The best ten countries are determined to be investigated from multiple perspectives. Assessing the most prominent countries using numbers (2) and (3) reveals that, despite the Netherlands has most average article citations (130.00), China possesses the most articles (568). Ireland is second in terms of average document citations, while not being among the top ten countries in terms overall document count. Despite having more published publications, Canada behind numerous other countries in terms of citations, especially the United Kingdom. India is in a comparable situation. This nation received more citations than its Thai equivalent, although it was not included in the top 10 overall. To render the investigation more understandable, information from figures (3) and (4) were transformed to a format of tables in Table (2). Therefore, it can be concluded that China and the Netherlands are leading the way in crowd logistics research. Switzerland, China, Ireland, and the Netherlands are significant countries in terms of average article citations.

International Journal of Innovation and Industrial Revolution
IJIREV
EISSN: 2637-0972
Volume 8 Issue 25 (June 2026) PP. 321-338

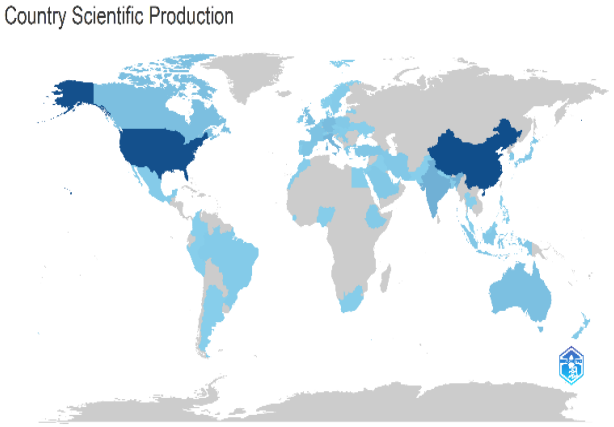

Figure 3: Presents A Global Map Showing the Quantity of Articles Released by Each Nation

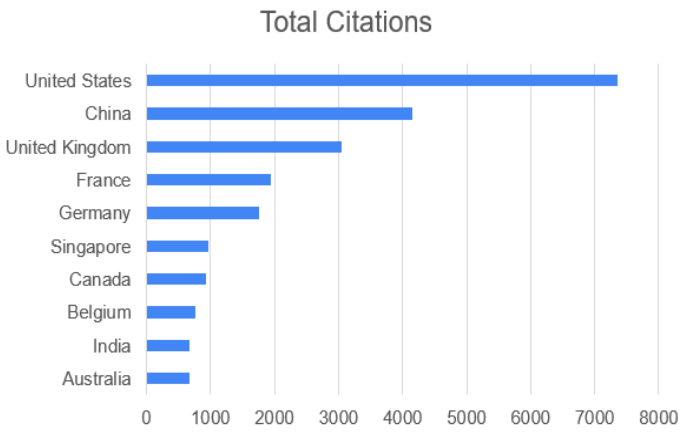

Figure 4: Displays The Quantity of Citations Obtained by Every Nation's Publications

Table 2: Displays The Nations' Designations, The Quantity of Publications Released, And the Number of Citations Gained

List	Nations	Paper	List	Nations	Gained Average Citations
1	China	568	1	Netherlands	130.00
2	United States	559	2	Ireland	124.00
3	India	125	3	China	95.50
4	Italy	105	4	Switzerland	94.33
5	Germany	75	5	Germany	82.75
6	United Kingdom	64	6	United States	74.56

International Journal of Innovation and Industrial Revolution
EISSN: 2637-0972
IJIREV
Volume 8 Issue 25 (June 2026) PP. 321-338

7	Canada	63	7	Brazil	74.20
8	Australia	60	8	Spain	72.00
9	Singapore	53	9	Canada	69.00
10	France	48	10	Iran	63.67

Most Relevant Authors

The authors are the most relevant depends on the number of papers they publish. Thus, R software computed it by counting the number of papers they had authored about crowd logistics. The data indicates that an author's importance rises with the quantity of publications they have authored. Figure (5) shows the 10 most relevant authors. It is clear that Roessingh, Peter, and Wang, Xueqin each have six papers, while Simpson, Stephen James, has nine. Readers may learn about the work of the top 10 authors and what still has to be done.

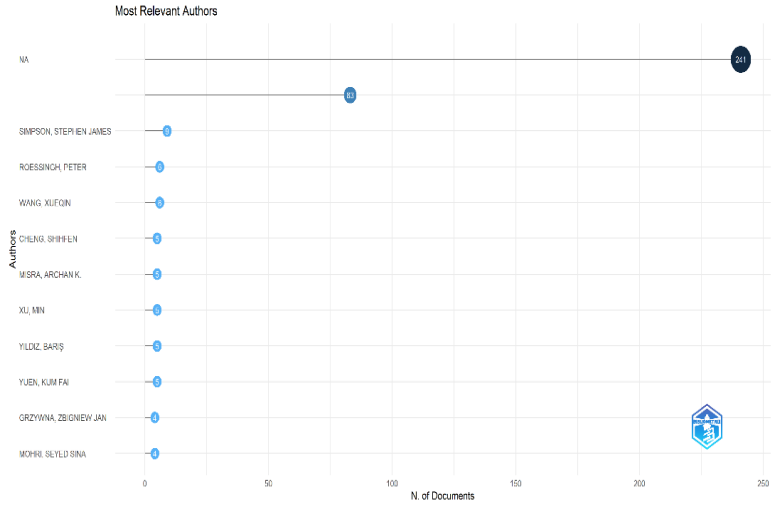

Figure 5: Contains The Titles of The Authors and The Number of Publications Written by Each

Influential Authors

The writers who have published the most on their topic are high placed top. The only basis for it is the references. As a consequence, major authors were identified based on the total number of papers received by the author. The most important writers are those with the most total papers in their account; those with less citations have less effect. Authors such as Simpson Stephen James with 671 documents, are clearly leading the chart. But authors such as Roessingh Peter are in 2nd position with 523 documents respectively. The rest of the authors are shown in figure (6).

International Journal of Innovation and Industrial Revolution
IJIREV
EISSN: 2637-0972
Volume 8 Issue 25 (June 2026) PP. 321-338

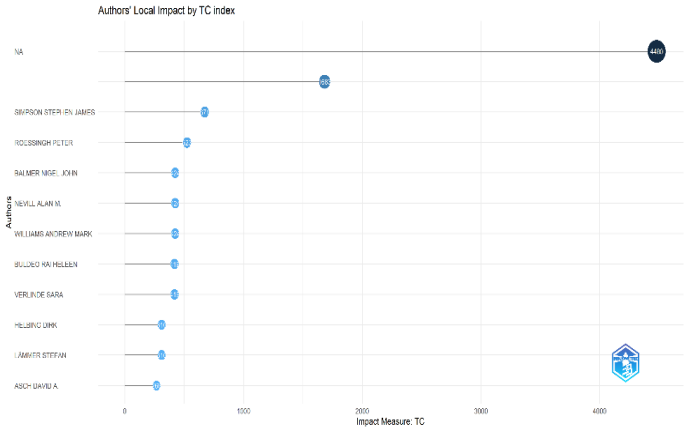

Figure 6: Contains The Authors' Names and Numbers of Total Publications Written

Citation Analysis

One way to do scientific mapping is via citation analysis. A connection exists of one publication makes reference to another. Additionally, "Krishnamoorthi et al., (2026), Jakhar et al., (2023), Badenes-Rocha., (2022), Nasir., (2022)" completed it. Citation examination uses two primary requirements: global citation and local reference. One way to measure an article's influence in citation analysis is to look at how many receives from readers' citations.

Most Global Cited Documents

Regardless of subject area, the texts with the highest number of citations are the most cited globally. Another group that conducted this study is "Jakhar et al., (2023)". Put simply, citations received by a publication are considered global citations regardless of whether they are from inside or outside its subject scope. One might also make the case that the articles published in the world's ten most-cited journals greatly affect the decision of reference styles used by other writers. Many articles, some of which are unrelated to crowd logistics and others which are, reference these sources. Figure 7 shows the 10 most significant works, and Table 3 analyses them (3). The rank 10 globally cited publications, as seen in Figure (7), are shown in Table (3) along with their titles, authors, and citation counts.

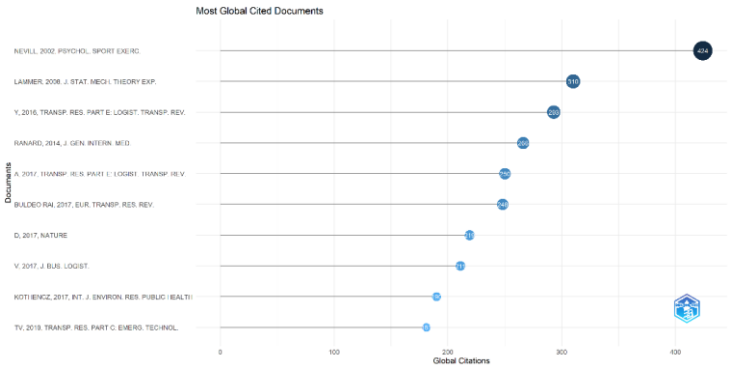

Figure 7: Shows The Most Influential Papers in Terms of Global Citation

International Journal of Innovation and Industrial Revolution
EISSN: 2637-0972 IJIREV
Volume 8 Issue 25 (June 2026) PP. 321-338

Table 3: Displays The Writing Designation, Author's Name, And References for The Most Significant Ten Worldwide Recognized Articles

No.	Article Title	Authors	Global citation
1.	The influence of crowd noise and experience upon refereeing decisions in football	Nevill, 2002, Psychol. Sport Exerc.	424
2.	Self-control of traffic lights and vehicle flows in urban road networks	Lämmer, 2008, J. Stat. Mech. Theory Exp.	310
3.	Towards enhancing the last-mile delivery: An effective crowd-tasking model with scalable solutions	Y, 2016, Transp. Res. Part E: Logist. Transp. Rev.	293
4.	Crowdsourcing—harnessing the masses to advance health and medicine, a systematic review	Ranard, 2014, J. Gen. Intern. Med.	266
5.	Crowdsourcing the last mile delivery of online orders by exploiting the social networks of retail store customers	A, 2017, Transp. Res. Part E: Logist. Transp. Rev.	250
6.	Crowd logistics: an opportunity for more sustainable urban freight transport?	Buldeo Rai, 2017, Eur. Transp. Res. Rev.	248
7.	A solution to the single-question crowd wisdom problem	D, 2017, Nature	219
8.	The rise of crowd logistics: a new way to co-create logistics value	V, 2017, J. Bus. Logist.	211
9.	Urban green space perception and its contribution to well-being	Kothencz, 2017, Int. J. Environ. Res. Public Health	190
10.	Supply, demand, operations, and management of crowd-shipping services: A review and empirical evidence	Tv, 2019, Transp. Res. Part C: Emerg. Technol.	181

Most Local Cited Documents

Publications that are discussed inside the subject area are known as local cited papers. For instance, a piece of writing that states, "was also attempted by Jakhar et al., (2023)" draws on references from other relevant works. Put simply, materials with local citations are specialized to that field. An additional study on crowd logistics, for instance, cites a crowd logistics paper. Consequently, most locally cited research looks at articles that are often referenced or mentioned in their region. Refer to the cited works in figure (8) for more information on the topic. For introductory publications, these sites may be relied upon, and they are especially relevant to crowd logistics. It is worth mentioning that, as mentioned of definition, local citations are always lower than global citations. The examination of Figure 8 is concluded in Table (4).

International Journal of Innovation and Industrial Revolution
IJIREV
EISSN: 2637-0972
Volume 8 Issue 25 (June 2026) PP. 321-338

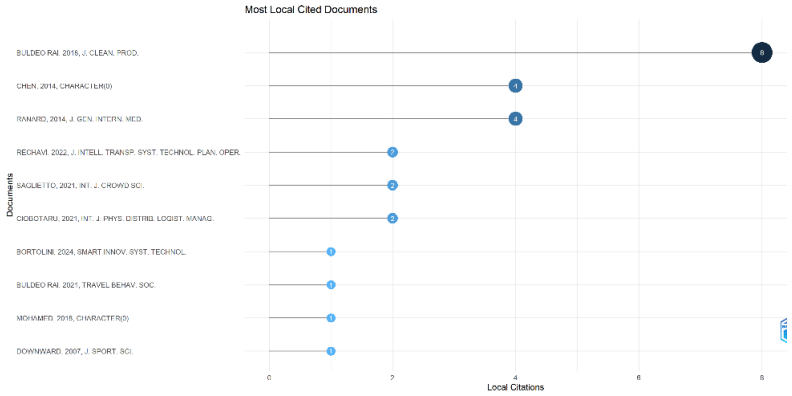

Figure 8: Represents Articles Getting an Overall Sum and Municipal References

Table 4: Reveals The Paper Designation, The Author's Identity, And References for The Most Significant Ten Regionally Cited Articles

No.	Article Title	Authors	Local Citations
1.	Success factors in peer-to-business (P2B) crowdlending: A predictive approach	A-M, 2019, Ieee Access	0
2.	Mining consumer reviews to generate ratings of different product attributes while producing feature-based review-summary	A, 2016, Int. J. Syst. Sci.	0
3.	“Crowd logistics”: the contribution of social crowds in logistics activities	A, 2016, Int. J. Web Inf. Syst.	0
4.	Humanitarian logistics and cultural diversity within crowd simulation	A, 2017, Comput. Y Sist.	0
5.	Stepwise distributed open innovation contests for software development: acceleration of genome-wide association analysis	A, 2017, Gigascience	0
6.	Crowdsourcing the last mile delivery of online orders by exploiting the social networks of retail store customers	A, 2017, Transp. Res. Part E: Logist. Transp. Rev.	0
7.	SIoT framework to build smart garage sensors based recommendation system	A, 2018, Adv. Intell. Syst. Comput.	0
8.	Crowd-based city logistics	A, 2018, Character	0
9.	Analysis of Simulated Crowd Flow Exit Data: Visualization, Panic Detection and Exit Time Convergence, Attribution, and Estimation	A, 2019, Assoc. Women Math. Ser.	0
10.	Crowd-based city logistics	A, 2019, Character	0

International Journal of Innovation and Industrial Revolution
IJIREV
EISSN: 2637-0972
Volume 8 Issue 25 (June 2026) PP. 321-338

Co-Citation Analysis

Co-citation review is a technique used for scholarly mapping. In a third work, 2 references serve to indicate that they are connected or that their subject matter structures are equivalent. According to Jakhar et al. (2023), co-citation analysis provides insight into an area of investigation's framework of concepts. This approach helps to identify the most significant articles by examining the generated groups. Each grouping has a theme and is organized around a certain base. Upon clustering the documents, the standard co-citation analysis identifies which pieces are most relevant to any given topic. Utilizing this strategy, researchers can go further into the subject depending on their own preferences. Potential academics may evaluate comparable publications to create literature on a certain topic. The VOSViewer as program use a co-citation approach to do the analysis. Papers will only be considered if it has at least 5 citations in published journals. Out of 2055, only 50 match the reference criterion. We examined Figure (9), providing the linkages weights.

Figure 9: Shows A Map of Co-Citation Analysis Based on The Authors' Name

In all, five clusters are formed. You may indicate how many other papers are connected to the papers in the reference list by giving the connections greater weight. A manuscript with more links is more suited for study.

Table 5: Shows The Interpretation of The Co-Citation Map

Colour of cluster	Author name	Citation
Red	Castillo	8
Green	Chi	6
Bule	Physical review e	6
Yellow	Afuah	6
purple	David M.	5

Figure (10) presents a chart with bars labeled "Document by Author," which depicts the quantity of papers released by a group of writers. The y-axis displays the quantity of papers, and the x-axis identifies the writers. With a total of nine papers, Stephen James Simpson is the most prolific author. He is followed by Wang, Xueqin, and Roessingh, Peter, each of whom has six papers. Each author, Xu, Min, Cheng, Shihfen, Yıldız, Barış, Yuen, Kum Fai, and Misra, Archan K., has five documents. Lastly, with four papers apiece, the final two writers displayed Thompson, Russell G. and Szmelter-Jarosz. have the fewest number of listed authors. The authors displayed document counts range from a minimum of four to a maximum of nine.

International Journal of Innovation and Industrial Revolution
EISSN: 2637-0972
Volume 8 Issue 25 (June 2026) PP. 321-338

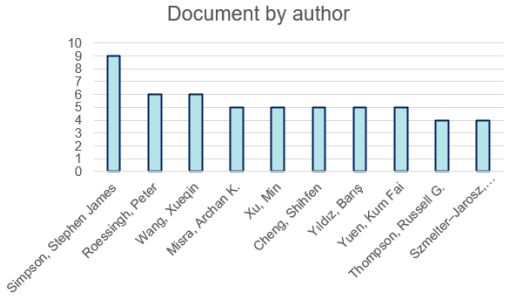

Figure 10: Represents The Most Significant Article From The Writers' Identity

Table 6 displays the writer combination among the partnerships and includes the leading ten writing pairs according to the quantity of interactions the authors have performed. The data table includes three columns: No. ranking, Author Pair, and Collaborations, indicating the total amount more collaborative contributions. With four collaborations, Badi, I.; Koster, R. is the highest-ranked author couple. Koster, R.; Li, Y., with three collaborators, come next. Three partners, each having two collaborations, are tied for third place: Bell, S.; Ghaderi, H.; Jha, S.; Koster, R.; Ardekani, S.A.; Hobeika, A.G. With just one collaboration apiece, the next five pairs ranked six through ten have the fewest collaborations on the list: Zhang, H., Hobeika, A.G.; Stough, R.R., and Jha, S.; Li, Y.; Glick, A.A. ; He, M., Glick, A.A. ; Li, H., Glick, A.A. Notably, Glick, A.A. occurs in three pairings rated 6, 7, and 8, while the author Koster, R. appears in three of the top five pairs.

Table 6: Represents The Writer Is the Combination of The Works

No.	Author Pair	Collaborations
1.	Badi, I.; Koster, R.	4
2.	Koster, R.; Li, Y.	3
3.	Ardekani, S.A.; Hobeika, A.G.	2
4.	Bell, S.; Ghaderi, H.	2
5.	Jha, S.; Koster, R.	2
6.	Glick, A.A.; He, M.	1
7.	Glick, A.A.; Li, H.	1
8.	Glick, A.A.; Zhang, H.	1
9.	Hobeika, A.G.; Stough, R.R.	1
10.	Jha, S.; Li, Y.	1

Co-Occurrence Analysis

Co-occurrence analysis is an additional "author keywords" scientific mapping technique. The study includes phrases that the author has used as keywords since it focuses on the author's chosen technique of doing research. Co-word analysis, which "was also attempted by Jakhar et

International Journal of Innovation and Industrial Revolution
EISSN: 2637-0972
IJIREV
Volume 8 Issue 25 (June 2026) PP. 321-338

al., (2023)," uses words that appear together to form themes or groupings. Only the keywords that appear in at least five articles are included for analysis since only those keywords are wanted.

Many authors utilize keywords to evaluate how an area of research is functioning, and only strong terms may be looked at. The location at which the bound is achieved with 35 words. Co-occurrence analysis was used to create six categories, as shown in Figure (11) and Table (7). The influence of a phrase grows increasing the extent of the circles. Crowd logistics and crowdsourcing were cited 54 and 43 occasions, accordingly. The terms Crowd-shipping and Crowdsourced delivery showed 27 and 9, correspondingly, while Urban freight appeared 8 times in a cluster (1) of red highlight words. Cluster (2) of green includes the phrases "Covid-19" (28), "Logistics" (21), and "Sustainability" (9). The terms " Machine learning " (33), “Logistics regression” (22), and " Social media” (7) are included in cluster (2) of Bule. The terms " Crowdsourcing " (43), “Lat-mile delivery” (24), and " Last mile delivery " (14) are included in cluster (2) of Yellow. The terms " Crowd logistics " (54), “Sharing economy” (22), and " Last-mile logistics " (10) are included in cluster (2) of Purple. The terms " Crowd shipping " (18), and " Business model " (5) are included in cluster (6) of Sky bule.

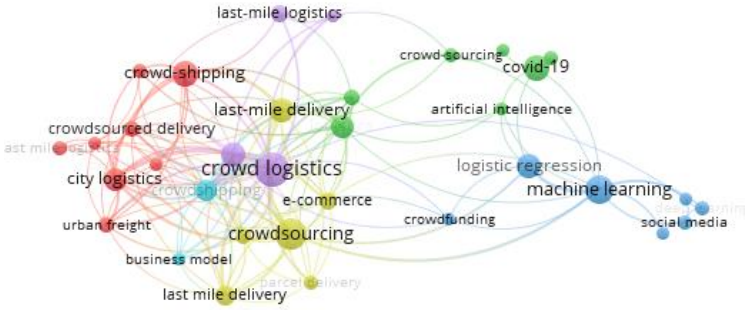

Figure 11: Displays An Outline of The Co-Occurrence of Words

Table 7: Displays A Variety of Themes Generated Using Co-Occurrence Investigation

Colour of cluster	Words	Strength	Final link strength	Times Used
Red	Crowd-shipping	11	32	27
	Crowdsourced delivery	13	20	9
	Urban freight	11	21	8
Green	Covid-19	5	5	28
	Logistics	14	22	21
	Sustainability	9	16	9
Bule	Machine learning	12	25	33
	Logistics regression	5	13	22

International Journal of Innovation and Industrial Revolution
IJIREV
EISSN: 2637-0972
Volume 8 Issue 25 (June 2026) PP. 321-338

	Social media	4	5	7
Yellow	Crowdsourcing	17	47	43
	Lat-mile delivery	14	31	24
	Last mile delivery	12	30	14
Purple	Crowd logistics	22	87	54
	Sharing economy	17	44	22
	Last-mile logistics	5	9	10
Sky bule	Crowd shipping	13	38	18
	Business model	7	9	5

Thematic Analysis

Conventional research was implemented to construct theme groupings, as demonstrated in Figure 12. These "became similarly examined by Jakhar et al., (2023)." Co-occurrence analysis is a scientific mapping technique that concentrates using phrases in order to create groupings of distinct topics by classifying buzzwords to appear often. Every expression served to describe the various ideas eventually emerged. After creating a subject matter, it is critical to evaluate the vocabulary used in the abstract, title, and phrases. Combining all of these expressions correctly creates a clearer picture. For the topic examination, researchers examined for sentences that appeared in minimum ten articles. This occurs when the entire covering encompassing all variables exceeds the writer's headline. Furthermore, more frequent expressions discovered in journals were evaluated. Despite a keyword's prominence within a certain region grows depending on its successive occurrence in other documents, researchers must nevertheless give it a weight of at least ten times before it occurs in articles. The following phase was an unsuccessful strategy alongside variable weights; with a weight of ten times, the findings were simple to interpret. A sum of ninety-three keywords fulfilled the minimum criterion, thus assigned value to phrase occurrences. 4 clusters formed generated. Theme 1 discusses the red cluster of logistics and crowdsourcing. These ideas are connected to the elements that influence the user experience. Crowdsourcing, logistics, crowd-shipping, city logistics, ships, and last-mile delivery are some of the key words. This subject mostly focuses on creative supply chain management and delivery strategies that leverage crowdsourcing to move items efficiently. Phrases like "algorithm" and "economics" also connect this cluster to others. Theme 2 aims to green cluster of the public health and demographics. greatly impacted by the Covid-19 outbreak. Covid-19, coronavirus illness 2019, pandemic, young adult, middle-aged, male, kid, adolescent, and cross-sectional research are among the fundamental ideas. Using study formats like as cross-sectional studies, research in this area seems to look into health outcomes, risk factors, and the transmission of disease across various demographic groups. Theme 3 talks about the bule cluster of the machine learning and statistical analysis. Regression analysis, machine learning, artificial intelligence, algorithms, logistics regression, logistics regressions, and reinforcement learning are the most used words. This subject reflects studies that model and resolve issues using sophisticated statistical and computational techniques, perhaps in a variety of fields such as behavioural or logistics research. Theme 4 talks about the yellow cluster of the search methodology and study subjects. Key words include

International Journal of Innovation and Industrial Revolution
IJIREV
EISSN: 2637-0972
Volume 8 Issue 25 (June 2026) PP. 321-338

procedures, China, the United States, human, adult, risk factor, controlled study, article, and priority journal. This topic connects the logistical/AI elements with the public health emphasis by addressing the administrative, methodological, and geographic setting of the research, as well as the study subjects (adults and people) and the research process itself (articles, controlled studies, and procedures). A consideration of predicting suggests a forward-looking, planning-oriented study emphasis, with the intention of managing and developing the transportation consumer present digitized web apps to meet future needs for crowd transporting and improve logistics in overall.

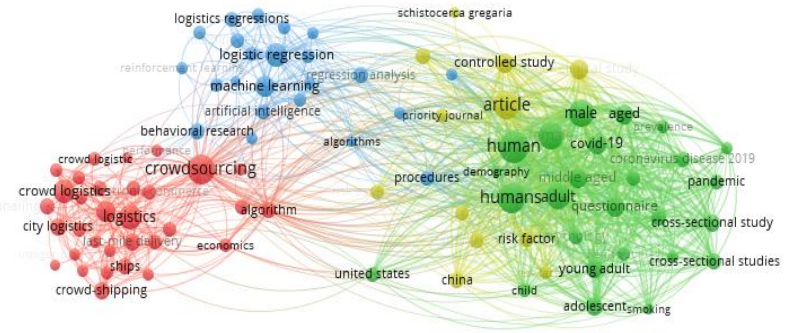

Figure 12: Displays Co-Occurrence Statistics to Develop Themes Across All Phrases

Thematic Evolution

The thematic evolution of Crowd logistics research reveals a structured analysis of its intellectual landscape, highlighting significant trends and publication patterns essential for academia and practice. Key contributors, influential publications, and leading countries aid researchers in identifying sources and gaps, while facilitating collaboration. The thematic evolution, depicted in Figure 13, illustrates changes from 2008 to 2026. Initially, the focus was on defining core concepts like "crowd," "platform," and "framework," which consistently remained important. Starting in 2016, interest grew in Operational Optimization/Last Mile, shifting from conceptual definitions to practical implementations, addressing crucial elements like routing and scheduling due to market demands for efficient last-mile delivery. Conversely, the Technology/Trust/Risk theme has seen a substantial rise post-2021, indicating that socio-technical challenges have emerged alongside technological advancements in platforms. Issues of data security, trust, and risk management are now recognized as vital for the sustainability of crowd logistics. Overall, the evolution demonstrates a shift from broad theoretical studies to targeted research on shared transportation and the systemic integration of innovative logistics methods.

International Journal of Innovation and Industrial Revolution
IJIREV
EISSN: 2637-0972
Volume 8 Issue 25 (June 2026) PP. 321-338

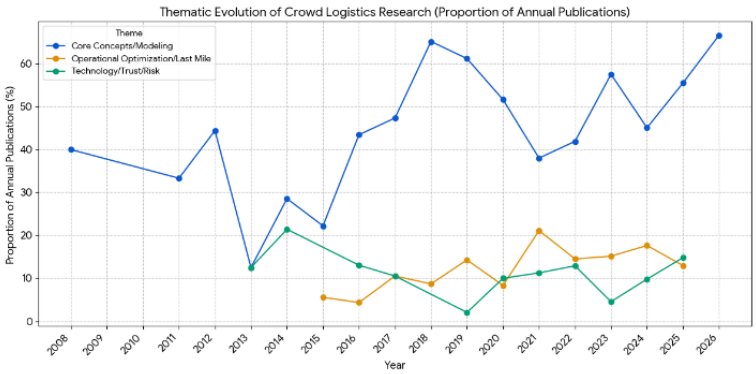

Figure 13: Highlights Thematic Evolution

Discussion

This bibliometric analysis of crowd logistics enhances academic dialogue and practical application. By compiling earlier studies, it improves scholarly understanding and identifies significant areas of research. The yearly output analysis indicates growth in crowd logistics research; however, the small number of annual studies reflects a need for more investigation. The study highlights ten pivotal journals, with Transportation Research Part E leading in articles. It recognizes key authors and countries, finding that the Netherlands has the highest average citations, while China has the most publications. Stephen James Simpson emerges as the most prolific author. The research traces thematic evolution from Core Concepts to sociotechnical issues, aiding academics in identifying impactful topics. It provides a co-citation analysis to help future researchers locate relevant works and assess their influence.

Conclusion

In conclusion, this research presents a comprehensive bibliometric mapping of crowd logistics, revealing significant countries, influential authors, and notable works, thus aiding scholars and policymakers in identifying research gaps and fostering interdisciplinary collaboration. Limitations exist, as findings are based solely on the Scopus database, suggesting that broader databases could yield more expansive insights. Future studies should enhance bibliometric mapping through additional databases, mixed-method approaches, and foresight analyses to improve coverage, validate results, and explore emerging trends and practical issues in crowd logistics.

Acknowledgements: The researchers are grateful to Management and Science University, Universitas Muhammadiyah A.R. Fachruddin, and Universitas Muhammadiyah Riau for providing the required resources and assistance over the course of this study. Special thanks are offered to colleagues and peers who provided excellent insights and critical input, significantly improving the standard of this research.

Funding Statement: No Funding

Conflict of Interest Statement: The researchers state that there certainly are no potential conflicts that arise associated with the publishing of their research. All writers participated to this project and endorsed the final text for submission to the International Journal of Innovation and Industrial Revolution (IJIREV).

Ethics Statement: This investigation excluded any human subjects, animals, or sensitive data that needed ethical approval. Authors affirm that the study followed acknowledged academic integrity and ethical publication norms.

Author Contribution Statement: All authors contributed significantly to the development of this manuscript. Thiban Krishnamoorth was responsible for the writing. data collection, analysis, and interpretation of results. Norhidayah Azman was overall supervision of the study. Sena Atmaja contributed to the finding the information for introduction. Mizan Asnawi contributed to the finding information for literature review. Upon submitting the work, all writers reviewed and accepted the last content.

References

Ali, A., Khattak, S. N., Rabbani, A. A., Hussian, M., & Mateen, A. (2025). Logistics Entrepreneurship in the Digital Era: Opportunities, Challenges, and Growth Models in Smart Warehousing and Last-Mile Delivery. *Inverge Journal of Social Sciences*, *4*(4), 98-111. https://doi.org/10.63544/ijss.v4i4.183

Badenes-Rocha, A., Bigné, E., & Ruiz, C. (2022). Online food delivery: An overview and bibliometric analysis. Hosted By The School of Hospitality and Tourism. https://doi.org/10.34190/ictr.15.1.123

Behl, A., Jayawardena, N., Pereira, V., Jabeen, F., Jain, K., & Gupta, M. (2023). Engaging and motivating crowd-workers in gamified crowdsourcing mobile apps in the context of logistics and sustainable supply chain management. Annals of Operations Research, 355(2), 2279–2309. https://doi.org/10.1007/s10479-023-05557-2

Bortolini, M., Galizia, F. G., Mora, C., Petroselli, G., & Siena, R. (2026). Modeling Last-Mile Deliveries in Urban Areas Using Crowd. Proceedings of the International Conference on Industrial Logistics (ICIL) 2025, 149–157. https://doi.org/10.1007/978-3-032-14489-8_16

Buldeo Rai, H., Verlinde, S., Merckx, J., & Macharis, C. (2017). Crowd logistics: an opportunity for more sustainable urban freight transport?. European Transport Research Review, 9(3), 39. https://doi.org/10.1007/s12544-017-0256-6

Cramer, F., & Fikar, C. (2025). Modeling sustainable crowd logistics delivery networks: A scoping systems thinking review. Sustainability Analytics and Modeling, 5, 100039. https://doi.org/10.1016/j.samod.2025.100039

Hashem, G. (2025). Examining intention to use crowd logistics: A synergy of unified theory of acceptance and use of technology and social exchange theory. Sustainable Futures, 9, 100687. https://doi.org/10.1016/j.sftr.2025.100687

Howe, J. (2006). The rise of crowdsourcing, Wired. http://www. wired. com/wired/archive/14.06/crowds.

JAKHAR, R. BIBLIOMETRIC ANALYSIS OF FRONT-OF-PACK-LABELLING ATTRIBUTES. https://doi.org/10.58419/gbs.v9i2.922309

Krishnamoorthi, T., & Azman, N. (2026). Trends and research user intent as a satisfaction in using online food delivery app a bibliometric analysis. Edelweiss Applied Science and Technology, 10(1), 1099–1118. https://doi.org/10.55214/2576-8484.v10i1.11863

Mohri, S. S., Nassir, N., Thompson, R. G., & Ghaderi, . (2025). Investigating Opportunities in Crowd-Shipping by Parcel Receivers: A Behavioural Analysis. Travel Behaviour and Society, 41, 101066. https://doi.org/10.1016/j.tbs.2025.101066

Nasir, N. S. A., Rahman, N. L. A., Mutalib, H. A., & Rahman, R. H. A. (2022). A Review and Bibliometric Analysis of Online Food Delivery by Using Scopus Database. Journal of Management & Marketing Review (JMMR), 7(3). https://doi.org/10.35609/jmmr.2022.7.3(8)

Rai, H. B., Verlinde, S., & Macharis, C. (2018). Shipping outside the box. Environmental impact and stakeholder analysis of a crowd logistics platform in Belgium. Journal of Cleaner Production, 202, 806-816. https://doi.org/10.1016/j.jclepro.2018.08.210

Rześny-Cieplińska, J., & Szmelter-Jarosz, A. (2019). Assessment of the crowd logistics solutions—The stakeholders' analysis approach. Sustainability, 11(19), 5361. https://doi.org/10.3390/su11195361

Zhang, M., Xia, Y., Li, S., Wu, W., & Wang, S. (2019). Crowd logistics platform's informative support to logistics performance: Scale development and empirical examination. Sustainability, 11(2), 451. https://doi.org/10.3390/su11020451