



ISSN: 2454-132X

Impact Factor: 6.078

(Volume 12, Issue 5 - V12I5-1207)

Available online at: <https://www.ijariit.com>

Applications of Operations Research Consumer Behaviour

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ABSTRACT

This review is a literature/bibliometric analysis of Consumer Behaviour to understand and scale the field in a holistic manner. Through this review, the authors have tried to find dominant, important themes in the field of Consumer Behaviour and the importance of Operational Research in the Consumer Behaviour sector by making it more reliable. The data for this review is procured from Elsevier's Scopus database by using important keywords. The final database uses 929 articles and reviews. It was found that recent shifts in the ecosystem have begun dominating and shaping this study.

Keywords: Consumer Behaviour, Operations, Research, Bibliometric Analysis.

1. INTRODUCTION

Consumer Behaviour (CB) is the application of psychological, sociological and marketing theories to explain consumer preferences, consumer evaluations and the process of consumer buying decisions; within the field of marketing these factors include trust, perceived value, emotions, habits and social pressure. Developed during World War II in the field of industrial engineering and operations research, it aids in the optimization of complex systems using mathematical models like queueing theory, inventory control and network design and scheduling. The two fields evolved largely separately: OR customers were external and treated as a forecastable demand to be met, while CB was based on surveys, interviews and psychological models, which are not connected with operational mathematics. In the past 20 years, however, behavioural variables like patience, loyalty, trust and willingness to pay have been incorporated directly in OR models. This convergence or fusion (CB-OR) now extends to logistics, retail, marketing, tourism and digital services and is the subject of this review.

Digital platforms have driven this change by making behavioural data far easier to observe. Retailers track clicks, searches, cart abandonment and reviews, while service providers see how long customers wait before leaving and what price makes them switch. Older OR work assumed uniform, fully rational customers choosing the cheapest or fastest option, whereas today's consumers compare prices in real time, abandon long queues, favour trusted sellers and switch providers easily. Platforms are also reshaping operations and supply chain research more broadly (Jia et al., 2026)).

Recent studies prove and display this shift. Demand-based service systems build behaviours such as leaving a queue early into queueing models to guide pricing and capacity decisions (Pei et al., 2021), and e-bike battery-swapping systems need flexible service-level management because arrivals and return habits change (Xie et al., 2024). Loyalty research links behaviour to business decisions as proven by Mahama-Musah et al. (2020) shows that loyalty in the tyre replacement market reflects habit, price sensitivity and product-specific trust, and the same authors find that internet access and nearby competitors should guide store location for a baby-care retailer (Mahama-Musah et al., 2021). Marmol et al. (2021) treat customer lifetime value as a location-planning problem solved with facility-location tools.

Strategic consumers also affect pricing. Arenoc et al. (2015) combine game theory and conjoint analysis to calculate equilibrium hotel room prices, showing that customer valuations can be quantified within competitive pricing models. Technology adoption is

another overlap. Early work examined how perceived usefulness, ease of use and security drive adoption of services such as internet banking (Cheng et al., 2006), recent reviews trace growing research on generative artificial intelligence in business and tourism (Li et al., 2025), and online recommendation systems can estimate customers' willingness to pay, informing pricing (Scholz et al., 2015).

Yet, even with these studies, the CB-OR literature is still scattered and published in different journals, subfields and methods of research, ranging from queueing theory, game theory, technology acceptance modelling to qualitative content analysis of literature. For last-mile logistics, the researchers state that the study of consumer-behaviour and operations-management studies of parcel self-collection ran parallel to each other and suggest that a dual-perspective framework should be used (Ma et al., 2022). There are few attempts to map the intellectual organization, thematic development and interaction patterns of the field beyond a single application domain, and newcomers and practitioners in the field lack an organized map of the field.

This study thus conducts a bibliometric and systematic review (Donthu et al., 2021), a method suited to fast-growing, fragmented fields, as shown by work on open innovation (Randhawa et al., 2016) and digital platforms in operations (Jia et al., 2026). Because Web of Science and Scopus differ in coverage, database choice is considered explicitly (Pranckutė, 2021). The study combines *biblioshiny* and *VOSviewer* (Van Eck et al., 2010) with PRISMA-guided screening (Moher et al., 2010).

It has three aims: (1) to trace publication and citation patterns and what may account for such patterns; (2) to establish the conceptual structure of the field by co-citation and keyword co-occurrence analysis, uncovering patterns, for example, of pricing and revenue management, technology adoption, patronage and loyalty, and sustainability-oriented operations; and (3) to identify influential authors, journals and institutions, and gaps that create a research agenda. It has a dual aim: scholars are given a map based on evidence to make the process more accessible, and practitioners are given a distillation of the operational impact of behavioural insights across sectors as it has been integrated. The methodology is then presented followed by descriptive findings and network findings, thematic clusters and implications, and finally key findings, limitations, and future research. It is not intended to solve this conflict between behaviour and optimisation, but to clearly document for future work.

2. LITERATURE REVIEW

The existing literature on consumer behaviour in operations research is summarized here based on 929 Scopus records published between 2009 and 2026. The review found that the studies fall into four themes: sustainable consumption and adoption, online retail, delivery and AI, strategic consumers and pricing, and food, energy and disruption. Behavioural studies explain why consumers choose as they do but seldom turn their results into inputs for decision models, while operations models often assume how consumers will react without testing it on real data (Wang et al., 2013 ; Nguyen et al., 2018). The studies reviewed are summarized in *Table 1*.

Table -1: Summary of Studies on Consumer Behaviour in Operations Research

Authors	Scope of Review	Theme
YIN R; AVIV Y; PAZGAL A; TANG CS (2009)	Shows that displaying only one unit at a time reduces, but does not remove, the loss from strategic customers in markdown pricing	Strategic consumers and pricing
EDWARDS JB; MCKINNON AC; CULLINANE SL (2010)	Compares the carbon footprints of home delivery and shopping trips; neither is always lower, but home delivery is usually lower than a typical trip	Online retail, delivery and AI
GENSLER S; HINZ O; SKIERA B; THEYSOHN S (2012)	Shows that some respondents always or never choose “no purchase”, which makes willingness-to-pay estimates unreliable	Strategic consumers and pricing
PENG DX; LAI F (2012)	Practical guideline on the use of partial least squares in operations management research, with a summary of past research	Research methods
WANG Y; WIEGERINCK V; KRIKKE H; ZHANG H (2013)	Survey of 288 people in China; attitude was the strongest direct influence on purchase intention for remanufactured products, which tests the assumption that consumers want them less than new ones	Sustainable consumption and adoption
MIAO L; WEI W (2013)	Compares pro-environmental motivations of consumers in household and hotel settings and finds that they differ	Sustainable consumption and adoption
REZVANI Z; JANSSEN J; BODIN J (2015)	Reviews the drivers of and barriers to consumer electric vehicle adoption and points out gaps in the theories used	Sustainable consumption and adoption
AL-DEBEI MM; AKROUSH MN; ASHOURI MI (2015)	Survey of 273 online shoppers; attitudes depended on trust and perceived benefits, and trust on website quality and online word of mouth	Online retail, delivery and AI

Authors	Scope of Review	Theme
LEE CH; CHOI T-M; CHENG TCE (2015)	Finds that firms which ignore loss-averse consumers keep too much stock when selling to strategic consumers	Strategic consumers and pricing
JANSSON J; NORDLUND A; WESTIN K (2017)	Survey of 1,192 people in Sweden; personal norms and opinion leadership were important in electric vehicle adoption	Sustainable consumption and adoption
NGUYEN DH; DE LEEUW S; DULLAERT WEH (2018)	Systematic review of research from 2000 to 2015; very little of it examined how firms could guide consumer behaviour to improve order fulfilment	Online retail, delivery and AI
PALMER K; TATE JE; WADUD Z; NELLTHORP J (2018)	Shows that the extra cost of owning hybrid and electric vehicles fell between 1997 and 2015 and was strongly linked to market share	Sustainable consumption and adoption
PORAT R; LICHTER A; TERRY LA; HARKER R; BUZBY J (2018)	Reports that much of the food lost in developed countries is lost in shops and consumers' homes	Food, energy and disruption
WEI MM; ZHANG F (2018)	Reviews research on strategic consumers who time their purchases, and its effect on pricing, inventory and information decisions	Strategic consumers and pricing
SCHLERETH C; SKIERA B; SCHULZ F (2018)	Finds that price consciousness and flexibility mattered more than fairness when consumers rejected dynamic electricity prices	Strategic consumers and pricing
TU J-C; YANG C (2019)	Perceived control over the resources needed had the strongest effect on consumers' intention to purchase electric vehicles	Sustainable consumption and adoption
DORA M; WESANA J; GELLYNCK X; SETH N; DEY B; DE STEUR H (2020)	Finds that the biggest food losses in the Belgian food processing industry happen during processing, so studies of consumers alone miss part of the problem	Food, energy and disruption
PAN X; DRESNER M; MANTIN B; ZHANG JA (2020)	Shows that consumer stockpiling before hurricanes affected product availability in shops afterwards	Food, energy and disruption
SARKIS J (2021)	Discusses supply chain sustainability after COVID-19 and argues that the long-term effects are still unclear	Food, energy and disruption
CHINTALAPATI S; PANDEY SK (2022)	Systematic review of artificial intelligence in marketing, grouped into five themes and 170 use cases	Online retail, delivery and AI
DAI D; LIU L; WU X (2023)	Game model of the waste battery remanufacturing market; the better subsidy depends on how willing consumers are to accept remanufactured products	Strategic consumers and pricing
POTWORA M; VDOVICHENA O; SEMCHUK D; LIPYCH L; SAIENKO V (2024)	Finds benefits of AI in personalisation and forecasting, and raises concerns about ethics and privacy	Online retail, delivery and AI
XU X; CHOI T-M; CHUNG S-H; SHEN B (2024)	Studies government subsidies for mask production under COVID-19 and finds that too much government control can upset the market	Strategic consumers and pricing
RIZZITELLO E; LO NIGRO G; MANCINI S; GANSTERER M (2026)	Combines a consumer experiment with an optimisation model; moral nudges worked better than money, and a shared-cart system cut costs by up to 76.8%	Online retail, delivery and AI

3. RESEARCH METHODOLOGY

A Systematic Literature Review (SLR) provides a structured way to collect, review, and analyse existing research. Unlike a conventional review, it uses a transparent process to identify, screen, and select studies. This reduces the risk of missing important work and helps reveal common themes, findings, disagreements, and gaps. For our research on consumer behaviour and operations research, SLR helped us compare studies, identify key concepts, and establish a reliable foundation for analysis.

PRISMA helps narrow a large collection of studies to those most relevant to the topic. It involves identifying records, screening titles and abstracts, and assessing studies for eligibility. Studies that do not meet the criteria are excluded. In our research, PRISMA kept selection consistent and transparent while reducing the chance of including unsuitable studies.

The Scopus search, conducted on 12 September 2026, initially returned 1,703 records related to consumer behaviour and operations research. A time-span filter retained studies published between 2009 and 2027, leaving 1,519 records and excluding 184. This period captures the field's development alongside digital technologies, data-driven decisions, and changing consumer and operational environments.

Only Articles and Reviews were retained next, reducing the total from 1,519 to 998 and excluding 521 records. An English-language filter left 936 records, excluding 62 studies. Finally, the journal-source filter retained 929 studies and excluded 7. The PRISMA flow diagram presents the identification, screening, eligibility, and inclusion stages.

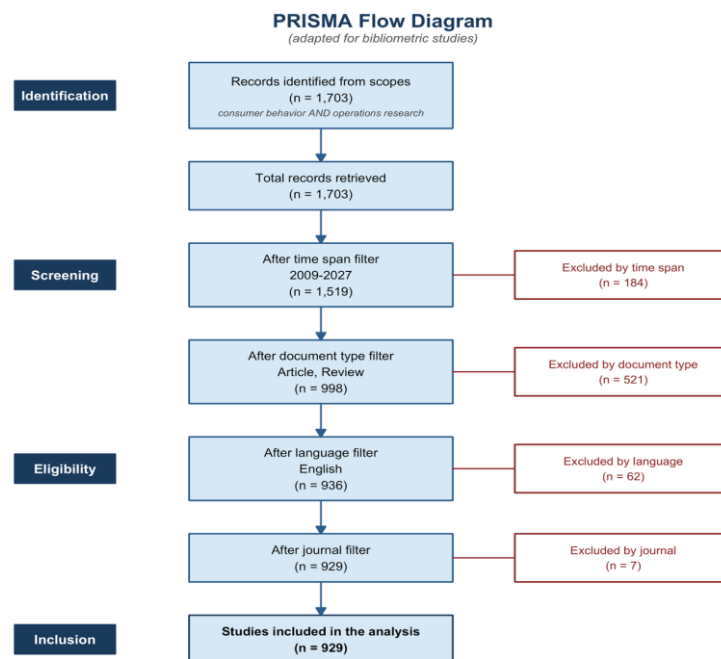
The literature shows that consumer behaviour and operations research are closely connected. Consumer-focused topics include decision-making, trust, online reviews and electronic word-of-mouth (e-WOM), satisfaction, service quality, e-commerce, social media, pricing, and consumer perceptions. Research on e-WOM highlights digital interactions and technology's growing role in consumer-firm relationships. Reference-pricing studies explore price fairness, price framing, promotions, and how prices influence consumer responses.

Because the study covers a large body of literature, manually reading every publication in detail would be difficult. Bibliometric analysis was used to identify patterns, trends, relationships, and emerging themes. Donthu et al. (2021) highlight its usefulness for analysing large volumes of scientific data and understanding how a research field develops over time.

This method suits our topic because the fields span connected areas such as decision-making, pricing, satisfaction, e-commerce, digital platforms, supply-chain management, optimisation, forecasting, and technology adoption. Bibliometric analysis identifies links among consumer behaviour, e-WOM, pricing, operational decisions, supply chains, and emerging technologies.

Scopus was the primary literature source, while ScienceDirect provided access to relevant publications. Mendeley Desktop and Mendeley Reference Manager organised references. R, RStudio, and biblioshiny were used to analyse bibliographic data and visualise publication trends, keywords, citations, and research themes.

Combining SLR and bibliometric analysis allowed us to select relevant studies systematically and examine the wider research landscape. SLR established which studies were suitable, while bibliometric analysis revealed broader patterns, relationships, and developments. Together, these methods provide a structured basis for identifying important research areas and potential gaps.



4. DATA ANALYSIS

This study investigates publication trends and research topics in consumer behaviour, customer behaviour and consumer choice using bibliometric data. The screening process narrowed the initial search results to a focused Business, Management and Accounting dataset. Bibliometrix and VOSviewer facilitate bibliometric mapping and visualisation (Aria & Cuccurullo, 2017; Van Eck & Waltman, 2010).

Figure 1 illustrates long-term growth in annual publications. Research output was relatively low in the early years, before increasing substantially from the middle of the 2010s. The 2026 count may represent an incomplete year and should not be interpreted as a confirmed decline.

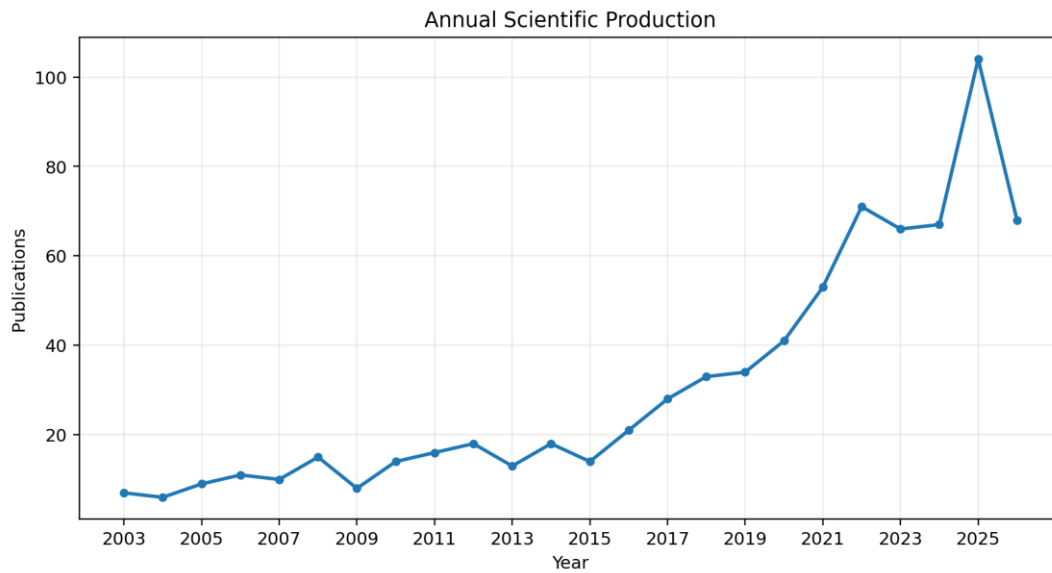


Figure -1: Annual scientific production.

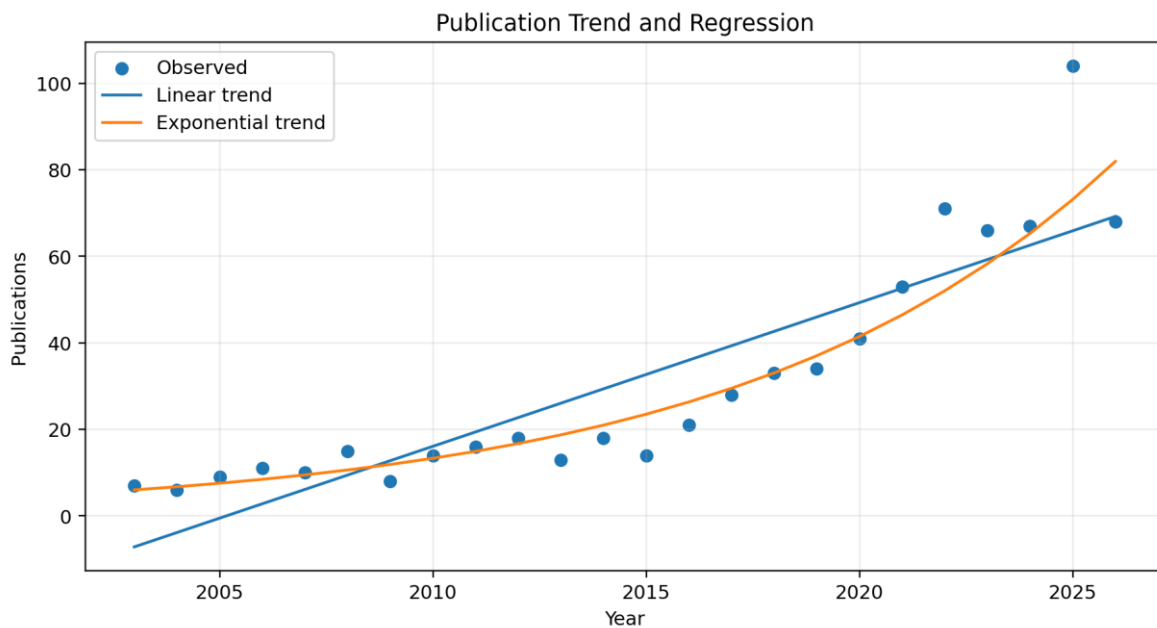


Figure -2: Observed publication output with fitted linear and exponential trends.

The regression results indicate a positive association between year and annual publication output. *Figure 2* compares linear and exponential trends; the exponential curve fits the observed data better, although it should not be treated as a definite forecast.

Table -3: Regression and trend-fit results

Regression measure	Value	Interpretation
Correlation coefficient	0.8822	Positive association
Linear model R ²	0.7782	77.8% of variation explained by year
Slope	3.3213	Average upward linear trend
p-value	1.203×10^{-8}	Below 0.05; statistically significant
Exponential trend R ²	0.9249	Better fit than linear trend

Figure 3 represents where the research in the data set is published.

Table -4: Leading Publication Sources

Publication source	Articles
Decision Support Systems	117
Journal of Business Research	91
Technological Forecasting and Social Change	84
Information and Management	40
Transportation Research Part E	38
Journal of Retailing and Consumer Services	37



Figure -3: Leading publication sources.

Figure 4 explores the most productive, or more recurring authors, A relatively small group of authors appears multiple times, whereas many other authors appear fewer times. This graph should be interpreted as productivity of publication within the selected dataset, and it itself does not reflect the quality, impact or citation of an author.

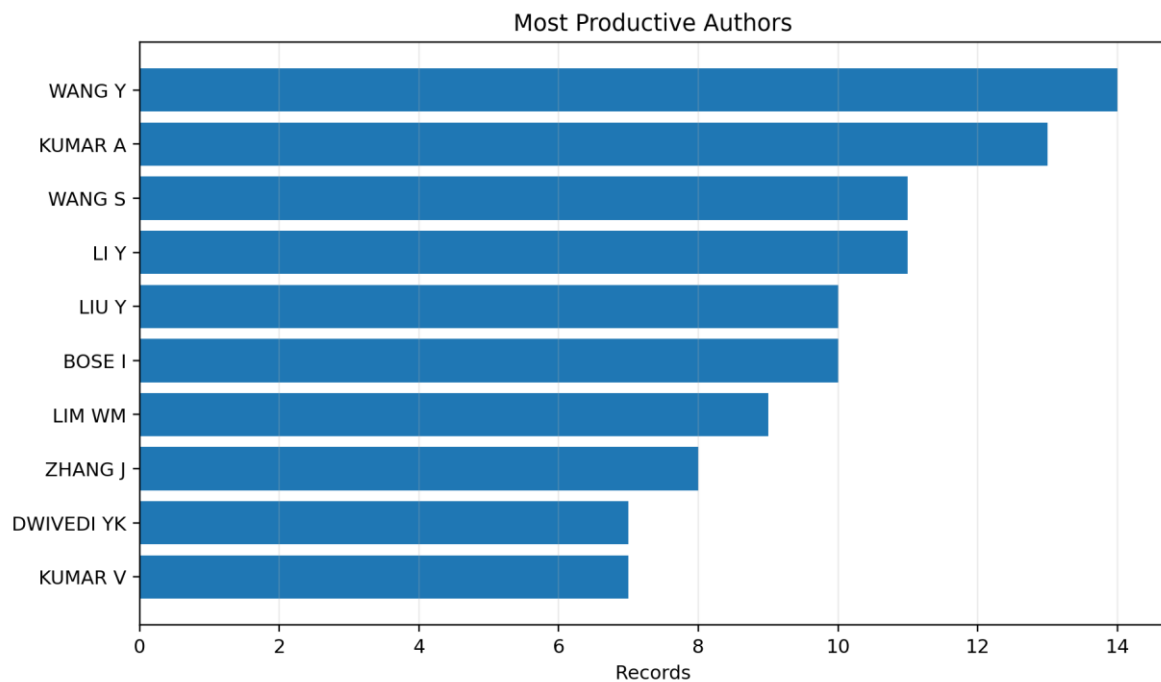


Figure -4: Most productive authors in the dataset.

Table -5: Most productive authors

Author	Records
Wang Y.	14
Kumar A.	13
Wang S.	11
Li Y.	11

The keyword graph gives an idea of what researchers are discussing most often. Artificial Intelligence is the most frequent keyword with 27 occurrences, followed by Machine Learning with 25. E-Commerce and Supply Chain Management both occur 20 times. Bibliometric Analysis and Sustainability occur 18 times each, while Literature Review occurs 17 times.

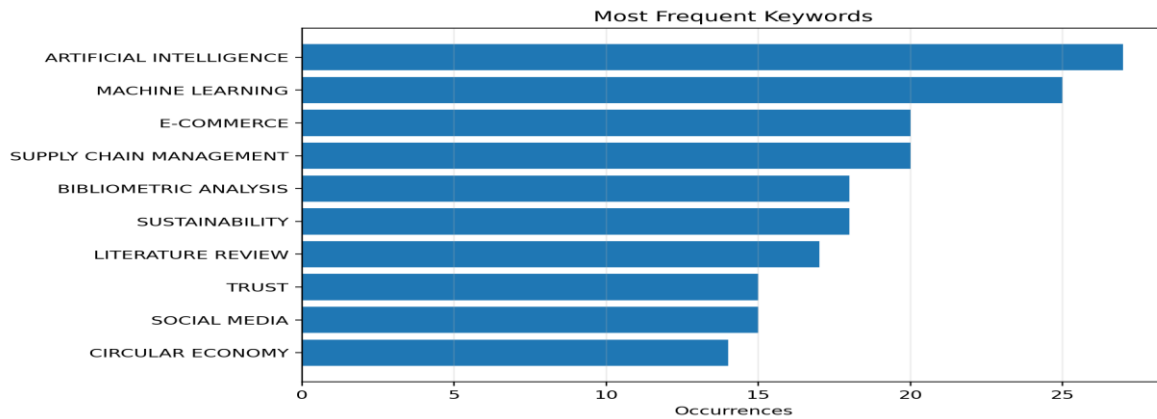


Figure -5: Most frequent keywords.

Table -6: Most Frequent Keywords

Keyword	Occurrences
Artificial Intelligence	27
Machine Learning	25
E-Commerce	20
Supply Chain Management	20
Bibliometric Analysis	18
Sustainability	18
Trust	15
Social Media	15

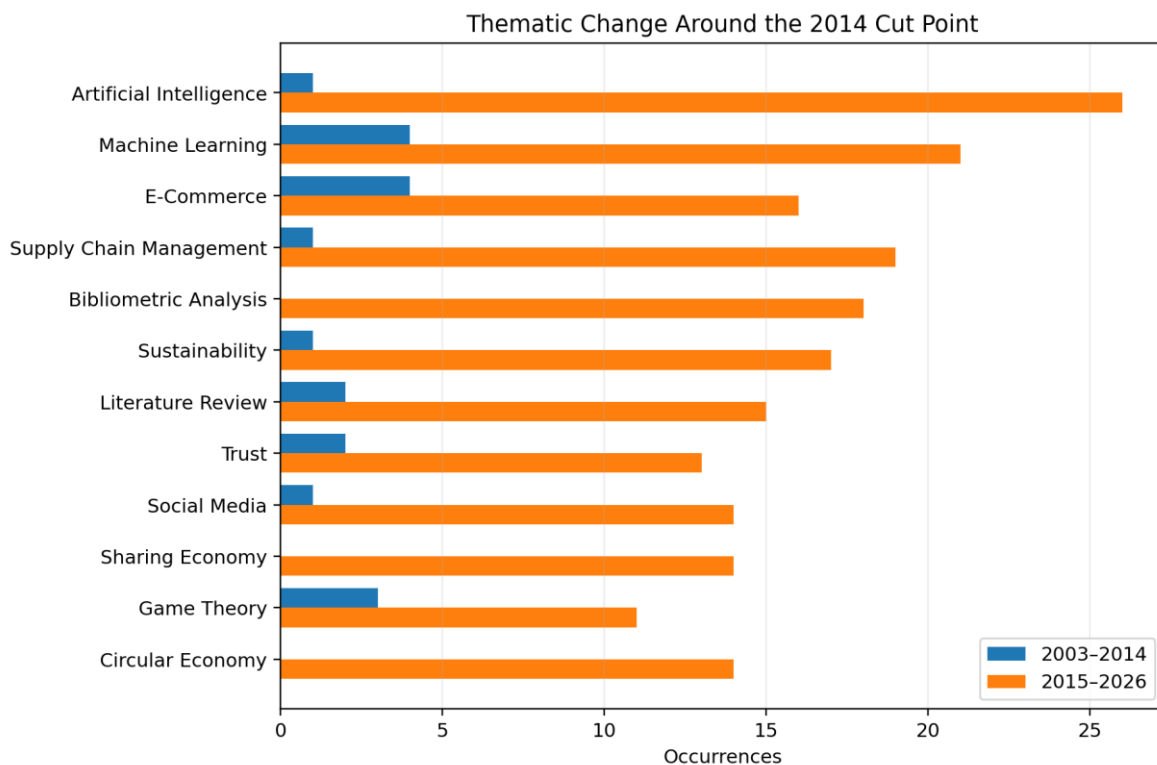


Figure -6: Major keyword changes before and after the 2014 cut point.

Table -7: Thematic Change (2014 cutoff)

Theme	2003–2014	2015–2026
Artificial Intelligence	1	26
Machine Learning	4	21
E-Commerce	4	16
Supply Chain Management	1	19
Total publications	145	600

The cluster graph also provides an alternative view by it displays which keywords appeared together instead of simply displaying their frequencies. It is a common practice to use VOSviewer for constructing and visualizing bibliometric maps (Van Eck & Waltman, 2010). By using the size of the node to represent the weight or value of the item, connections to indicate relationships between items, and colours to depict clusters of related items, VOSviewer allows bibliometric data to be displayed in a comprehensive and intuitive manner. Moreover, it has been noted that co-word analysis is a viable option for examining conceptual domain relationships and structures (Callon et al., 1983; Cobo et al., 2011).

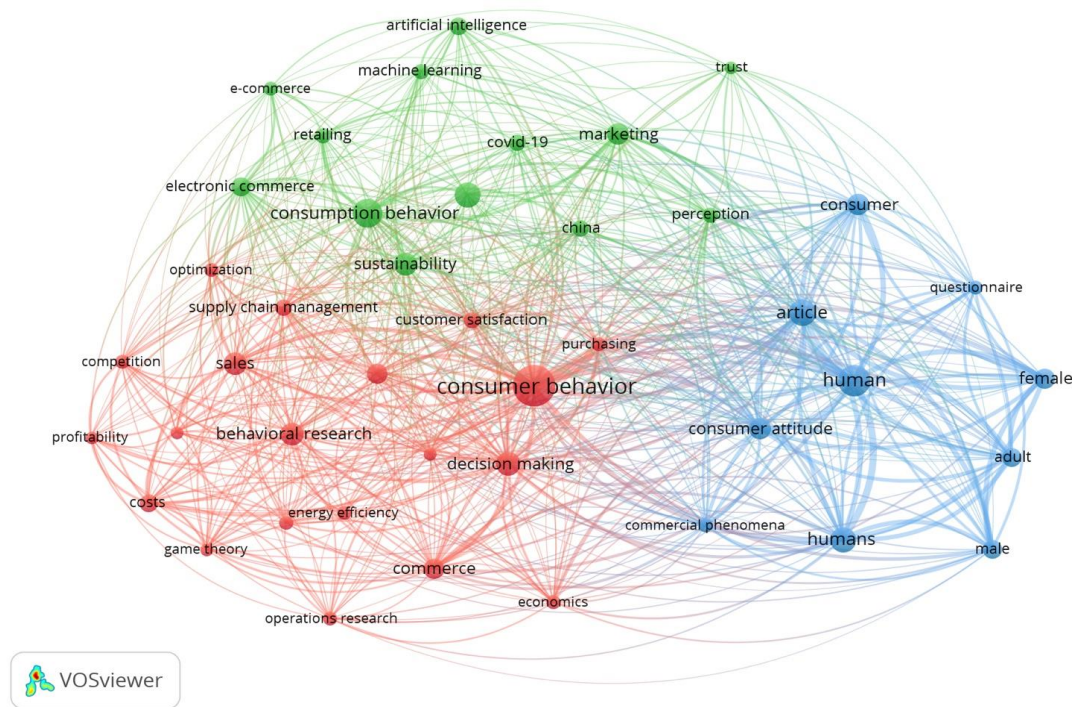


Figure -7: Keyword cluster/co-occurrence network.

The red cluster primarily focuses on consumer behaviour, decision-making, sales, behavioural research, commerce, costs, profitability and competition. Consumer behaviour is one of the larger words in this category. Purchasing and operations research also link this category with business decision-making.

The green cluster includes Artificial Intelligence, Machine Learning, E-Commerce, Electronic Commerce, Retailing, Marketing and Sustainability. Trust, Perception, Consumption Behaviour and COVID-19 also appear around this area. This category primarily represents technology and digital business topics along with consumer response and sustainability.

The blue cluster has more direct connections to consumers and empirical characteristics. Consumer, Human, Humans, Female, Male, Adult, Questionnaire, Consumer Attitude and Perception are seen. The questionnaire term indicates that survey-based empirical research is part of this category, whereas the demographic terms indicate attention to differences between consumer categories.

The clusters are not isolated from each other. Many links cross between the three colours. Consumer behaviour links with marketing, e-commerce and decision making, while trust and perception link digital topics with consumer topics. Purchasing and supply-chain terms provide links with operational decisions. This makes the network meaningful as it shows how technology, consumer behaviour and business operations are being studied together.

Country Scientific Production

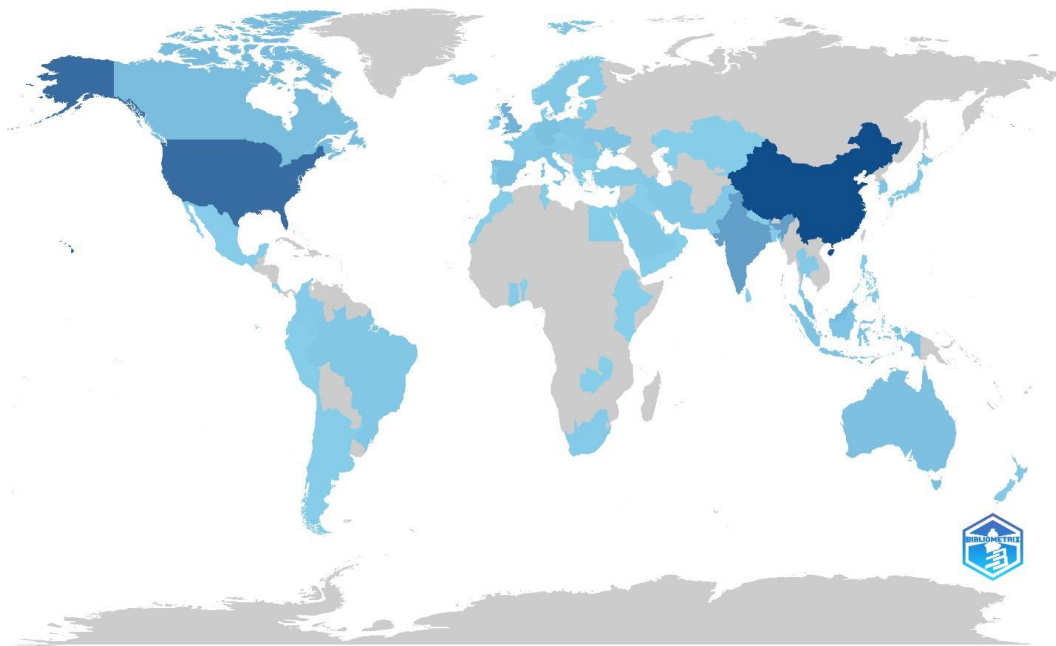


Figure -8: Country scientific production from the supplied Bibliometrix output.

The country production map represents the research activity of different regions. China and the United States are the most productive countries in the supplied map; their borders are the darkest. India, the United Kingdom, Asian countries, Europe, North America, and Australia are also relatively productive areas. The map shows the number of publications for each region; thus, it does not illustrate the degree of collaboration between countries.

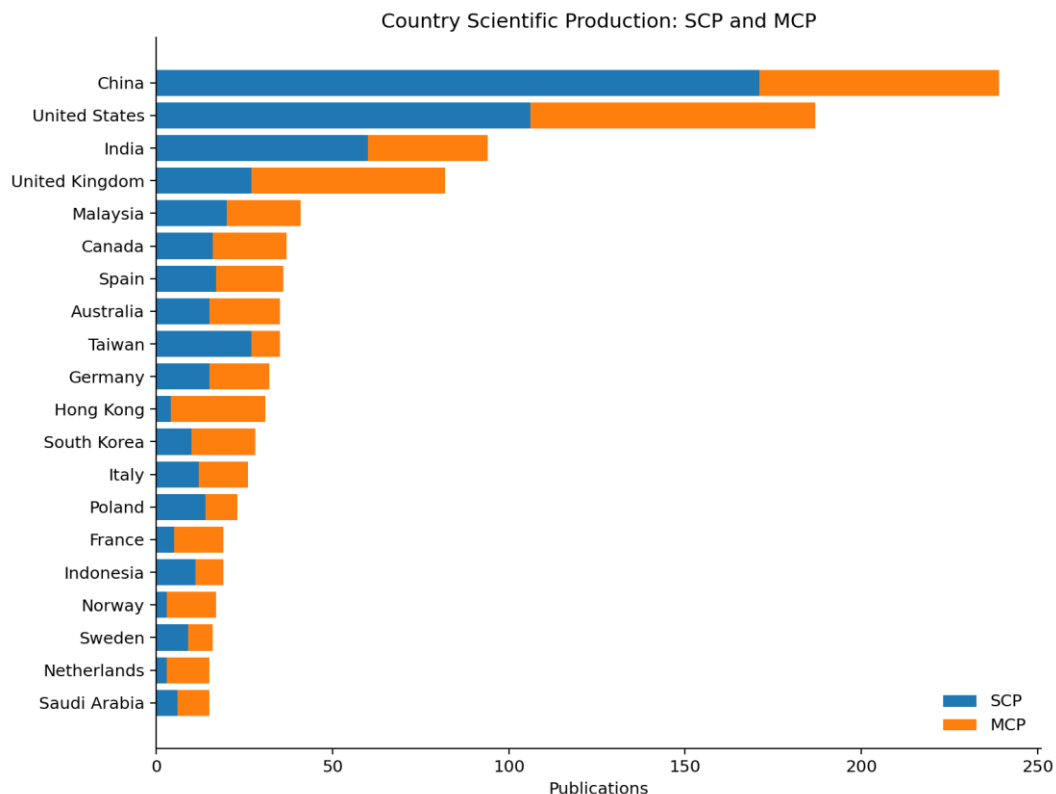
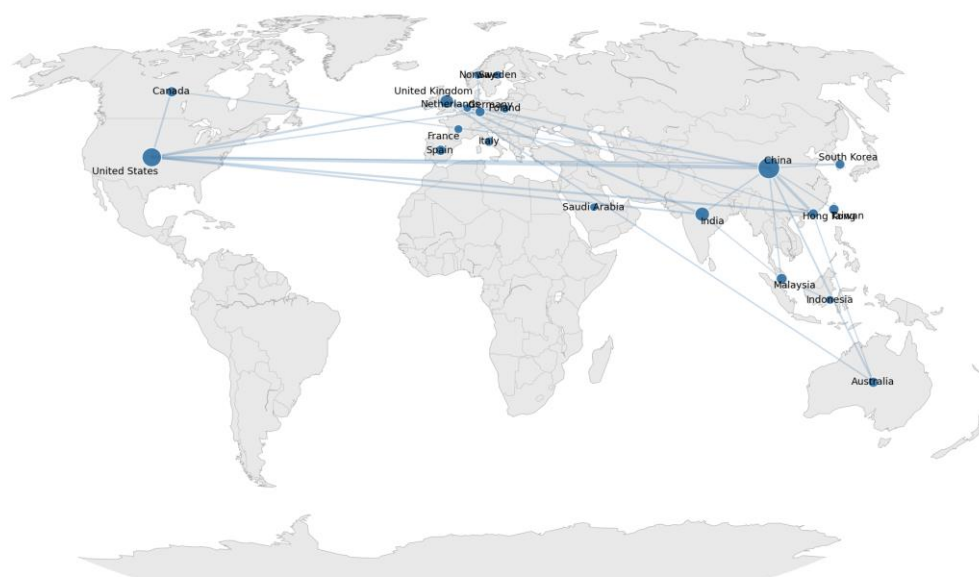


Figure -9: Country production divided into single-country publications (SCP) and multiple-country publications (MCP).

In separate country export, China has 239 publications: 171 single-country publications (SCP) and 68 multiple-country publications (MCP). The USA has 187 publications with 106 SCP and 81 MCP. India has 94 publications: 60 SCP and 34 MCP. The UK has 82 publications: 27 SCP and 55 MCP. Malaysia has 41, Canada has 37, Spain has 36, Taiwan has 35, Australia has 35, and Germany has 32.

The SCP and MCP indicators provide a simplified view of the distribution of publications in the separate country category. For example, the UK has more publications (MCP) in other countries than in its single publication category (SCP). Hong Kong has a significant number of international publications (MCP). The indicators describe the composition of the single publication data set.

World Collaboration Map



Node size = country publication count; line thickness = number of co-authored papers between countries

Figure -10: World collaboration map based on country co-authorship.

The map below shows the global collaborations between countries as identified by the papers co-written by the two countries. The strongest link between the two countries identified on the created map was between the United States and China, having 21 works published together. China and Hong-Kong have 16 articles, and China and the United Kingdom have 12. India and the United Kingdom, Hong Kong and the United States, and the United Kingdom and the United States have 11 papers each. There are 9 works by the author(s) India and the United States.

Other countries: China, India, Malaysia, South Korea, Germany, and Canada, the US has bilateral links of 5, 5, 5, 5, 6 and 7 respectively. Other countries: Australia has bilateral links of 8 with China, 7 with Canada, 6 each with UK and US, and 5 with South Korea and Germany. So, the map reflects the research works done by Asian, European, American and Australian authors. Please note that this map should not be interpreted as a good representation of the world's research links and is merely based on the information given in the separate Scopus export.

The analysis has some limitations. The first is that the databases are not comprehensive. The study is based on the database queried and the search terms/filter. Other databases or search methods might yield different results. It's a well-known problem of bibliometric research (Zupic & Čater, 2015).

The second restriction is the shortage of metadata. A total citation field has been registered as zero for the 929-record export, making it impossible to make a meaningful analysis based on citation-impact. The country and institution fields in that export are also not appropriate for the calculation of the country network. The country analysis is therefore based on the above-mentioned single BibTeX export of Scopus.

Third is citation lag; lately published works were not cited as much as the older works. However, the number of citations should not be compared to each other directly, considering the age of the publications. The number of publications in this dataset can also be incomplete for the year 2026.

The fourth is sensitivity to the growing season. The regression is based on the data for the period specified. The higher the R2 value of the exponential curve, the better, but this does not mean that future publications will necessarily be exponential. The trend should only be used to detail the evolution of the field's history and should not be used as a definite projection.

The results for each keyword also depend on the metadata that has been added to the database and how it has been cleaned up. Sometimes the separate keywords may have terms that are similar. The VOSviewer map should thus be used in conjunction with the results of the frequency of keywords and/or the results of the thematic changes, and not as a standalone map.

So, while placing the graphs together allows to see the consistency in data – the increase in publication productivity and positive regression trends between year and publication. Notice that the exponential trendline was more in line with the historical series than the linear trendline option. The most prolific sources and authors suggest that the literature deals with various business subject areas from technology, information systems, logistics and management.

From the keywords result, it is evident that the focus is clearly changing towards Artificial Intelligence, Machine Learning, E-Commerce, Supply Chain Management and Sustainability. The cluster graph suggests that besides these focuses, the consumer behaviour and decision-making areas represent an important behavioural aspect of the literature, while Artificial Intelligence,

Machine Learning and E-Commerce symbolise the digital aspects. Another related area of literature is consumer attitude, perception and demography terms.

The country analysis done on the individual Scopus export file shows international co-authorships and multiple contributions from various countries. Overall, the results indicated an increase in the number of publications and shifts in the research topics in the research area analysed, with a continued focus on the traditional research fields of management and operations, but alongside a focus on digital technologies, consumer behaviour and sustainability.

5. FUTURE RESEARCH AGENDA

CB–OR research should be more integrated in the future; more comparative, and methodologically more rigorous. First, the behavioural evidence needs to be put into decision models, e.g., constructs like trust, attitude, personal norms, and willingness to pay need to be used as the model parameters rather than assumed (Wang et al., 2013; Nguyen et al., 2018). Some examples are the conjoint-based hotel pricing game (Arenoe et al. 2015), or using the online behaviour to inform store location (Mahama-Musah et al. 2021). Researchers need to investigate the robustness of the optimal prices and the optimal size of the inventory and fleet to parameter errors and establish a common template of estimation, calibration, optimization and validation. AI and marketing research require research to go beyond use cases and ethics (Chintalapati and Pandey, 2022; Potwora et al., 2024) and explore the impact of personalisation and forecasting on inventory, delivery costs and capacity, the roles of trust, fairness and transparency in shaping acceptance, and the constraints of privacy and data protection on operations.

A growing interest is strategic and loss averse consumers (Lee et al., 2015; Wei and Zhang, 2018); however, their parameters are typically fixed and do not require measurement, thus field or online experiments are required. Sustainability is another key consideration. Consumer sorting and participation are key to the success of take-back and remanufacturing, which should be incorporated into circular-economy network models through measures of participation and mediation on the link between intention and behaviour in last-mile delivery of remanufactured goods, with testing of nudges against monetary incentives (Gunasekara et al., 2025; Rizzitello et al., 2026). Panic buying and stockpiling in times of shocks like COVID-19 is also worth considering (Sarkis, 2021).

Future research should also explore the differences between high-, middle- and low-income markets, include the effects of price sensitivity, trust and adoption across culture, regulation and ‘digital maturity’ as well as increase collaboration with South Asia, Africa and Latin America, as output is concentrated, findings do not always generalise (Miao and Wei, 2013). From the methodological point of view, studies should include a combination of quantitative and qualitative methods, with surveys, experiments and interviews, optimisation and simulation, and the incorporation of text analysis of online reviews and longitudinal studies that track trust, adoption and loyalty.

Future bibliometric studies should rely on multiple databases including Web of Science (Pranckutė, 2021), and incorporate conference papers, non-English literature, and drop noisy terms like “human” and “article” as well as complete exports with citation field, country field, or both to facilitate co-citation and citation-impact analyses (Donthu et al., 2021). Precise reporting should be required for databases, search dates and filters; manual or machine-assisted screening is necessary because keyword searches overestimated the number of integrated studies. Lastly, albeit modest, new segments, such as the metaverse, sharing economy, circular business models, blockchain and responsible AI, warrant investigation for the implications they bring to demand, operational design and trust.

6. CONCLUSION

In this study, Consumer Behaviour (CB) and Operations Research (OR) were connected through a bibliometric and systematic review (Donthu et al., 2021). It followed publication and citation trends, charted the architecture of the field, and pinpointed key authors, journals and institutions and future research avenues. It answered to a gap in the introduction: there is a growing trend of using behavioural ideas to guide operational decisions, but no study had brought together this fragmented research.

Annual publications rose from 7 in 2003 to 104 in 2025, accelerating after around 2015 (41 in 2020, 71 in 2022). From the results of the keyword analysis, three clusters emerged, of which two touch on each other. Keyword analysis revealed three overlapping clusters: consumer behaviour, decision making and competition; artificial intelligence, machine learning, e-commerce, retailing, sustainability and trust; and survey-based work on attitudes, perception and demographics. The relationship between technology and consumer behaviour and operations is explored through links e.g. trust. The number of times “artificial intelligence” was mentioned increased from 1 to 26 after 2014, followed by machine learning (from 4 to 21 mentions) and e-commerce (from 4 to 16 mentions) and supply chain management (from 1 to 19 mentions).

The review provides a repeatable map developed by following recommended methods (Donthu et al., 2021);(Zupic & Čater, 2015) and mapping tools (Aria & Cuccurullo, 2017);(Van Eck et al., 2010) . It can be used to support efforts to construct behavioural ideas into optimisation models as in Mahama-Musah et al. (2020). The term operations research is also not used in many other documents, indicating that OR specialists might not be using the consumer behaviour literature. The findings are a justification for managers to set up patience, trust and readiness to adjust into operational choices, otherwise cash will remain on the table because strategic and informed customers will take their money elsewhere. This is the difference between what is expected and what occurs in the real world, and the outcomes are what’s important for the policymaker, especially in the circular economy and public health. Special issue for journals might include bringing behavioural aspects into optimisation models and OR aspects into loyalty and pricing research.

The restrictions are in four areas. The September 2026 search could not include very recent work or the undercount of the 2026 count. On technical knowledge, the advanced techniques were limited by skill thresholds. On the main export, there were skill limits to advanced techniques, and there was no citation field or country field to perform citation-impact analysis and citation lag distorts raw export counts. In the scope, articles from journals, books and conference proceedings (other languages) were excluded, as was

the use of other languages for the journals (Zupic & Čater, 2015). Inconsistent and generic keywords obscure the themes on understanding; readers trained in CB/OR might interpret clusters differently.

Despite these constraints, the review reveals a rapidly expanding field, characterised by AI, e-commerce, sustainability, but that typically does not bring together behaviour and formal optimization. The pattern in the past is exponential; and the apparent drop in 2026 is probably a partial year. Further research may involve a longer timeframe, more databases, and more advanced computational tools, along with mixed-method studies to bridge the gap between behavioural research and operational modelling.

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